

OVERSEAS NEWS

Shell to rejoin search for oil off India

BY JOHN ELLIOTT IN NEW DELHI

THE ROYAL DUTCH SHELL group is re-entering India after an absence of more than 10 years to explore for oil off the shores of Kerala and Karnataka states in the south-west. It signed a contract in New Delhi on Saturday and is the fourth international company to join India's third round of offshore exploration...

Junejo 'planned to curb Zia's power'

BY CHRISTINA LAMB AND MOHAMMAD AFTAB IN ISLAMABAD

SERIOUS DIFFERENCES on economic policy, and the discovery of a plan under which Mr Mohammad Khan Junejo, the Pakistan Prime Minister, would have stripped President Zia of his post of army chief of staff...

LATE PRESIDENT'S SON IS REGIME'S MOST SERIOUS CHALLENGE SINCE 1940

Mexican left unites under Cardenas

BY DAVID GARDNER IN MEXICO CITY

FOR THE FIRST TIME in its history Mexico's political left has formed a united front to take on the regime in presidential elections on July 6: the Mexican Socialist Party has joined forces with the swelling left-wing nationalist current led by Mr Cuauhtemoc Cardenas.

Delhi to begin Jaffna withdrawal

BY Myrlyn de Silva in Colombo

INDIA WILL withdraw some troops and armour from Sri Lanka this week. It will be the first reduction since an Indian peace-keeping force was dispatched to Sri Lanka as part of the deal signed last July by President Janas Jayawardene of Sri Lanka and Mr Rajiv Gandhi, India's Prime Minister...

segments of Mexican society that it is at last possible to challenge the hegemony of the PRI, which they believe incapable of reform. The is what has sucked in the fractured independent left behind Mr Cardenas, in what may now have a multiplying effect on his support.

Venezuela's national oil company may face extortion probe

BY JOSEPH MANN IN CARACAS

VENEZUELA'S national oil company, Petroleos de Venezuela SA (PDVSA), should be investigated for alleged cases of extortion, according to the main political opposition group, the Social Christian Copei Party.

Caracas signs joint deal to build \$586m coalmine

BY OUR CARACAS CORRESPONDENT

THE VENEZUELA Government and two international coal companies, Anglocol and Arco, have signed an agreement finalising a joint venture to develop a \$586m coalmine in western Venezuela.

US and Japanese builders link

BY RODERICK ORAM IN NEW YORK

TURNER and Kumagai Gumi, leading construction companies in the US and Japan respectively, have agreed to pursue joint projects so that they can benefit from each other's home base advantage.

Kansallis Banking Group

Looking for specialist market niches

By Victor Thorne, Helsinki



As Finland's more go-ahead industrial enterprises internationalised, the pressure on banks like Kansallis to offer wholesale banking facilities abroad grew in proportion.

Advertisement for St James Court Hotel. Text includes: 'AT ST JAMES COURT HOTEL, IT WILL TAKE THE WEIGHT OFF YOUR FEET WITHOUT WEIGHING HEAVILY ON YOUR BILL. Rest assured that David Linley's marquetry marvel, reposing gracefully on our upper landing, won't sit awkwardly on your bottom line.'

Advertisement for Kansallis Banking Group. Text includes: 'When the Kansallis Banking Group talks about offering the entire spectrum of banking, from retail to merchant, commercial and investment, it is not a conservative form of sensationalism.' Includes a table of financial data for 1987.

Continuation of the Kansallis Banking Group advertisement. Text includes: 'We aim to keep our triple-A status'. Discusses the bank's international operations and growth.

UK NEWS

Lawson says tax reforms are vital for British economic renaissance

BY RALPH ATKINS

INCOME TAX reductions have become part of "the new international consensus of the 1980s," says Mr Nigel Lawson, Chancellor of the Exchequer, in a pamphlet published today.

In a comprehensive review of the Government's taxation policy, Mr Lawson argues that its reforms are about changing the "very culture" of Britain. He says tax reform is an essential instrument for improving the performance of the economy and has played "a critically important part in Britain's economic renaissance."



Nigel Lawson: tax burden has moved to better-off

The pamphlet, published by the Conservative Political Centre, a party think tank, contains the first overview of taxation policy written by Mr Lawson since he became Chancellor.

Mr Lawson says other countries are following tax policies similar to Britain's. In particular, income tax rates are being cut in the US, Canada, Japan and New Zealand. He says the burden of income tax in Britain has shifted from the great bulk of the population to the better-off. In the final year of the last Labour government, the top 5 per cent of taxpayers shouldered 24 per cent of total income tax payments; in the current financial year - in spite of top rate tax cuts - they will bear 28 per cent.

"We have now brought the top

rate down to 40p in the pound, which most people will regard as reasonable. So for the first time in our adult lives, Britain is a low tax country," he says.

Mr Lawson links tax policy closely with the Government's macro-economic strategy. He says it has proved wrong those economists who argued in the early 1980s that a budget deficit was needed for economic growth. "Everyone - or almost every-

one - now accepts that the proper role of macro-economic policy is to keep downward pressure on inflation and to maintain a stable framework in which the private sector can expand."

Mr Lawson says the Government's objectives have been to leave people with more of their own money and to reduce marginal tax rates so that it is worth working for an extra pound of profit or earnings.

It has also sought to ensure that people's choices are not distorted as little as possible.

He admits that taxes and national insurance as a proportion of national income have risen since 1979 but says the burden is now better distributed. He argues that taxes on companies have been shifted away from employment to profits, while taxes on individuals have been transferred from income to spending.

Looking to the next decade, Mr Lawson says planned changes to the tax system that will allow husbands and wives to be taxed independently will enhance further "the acceptability" of the tax system.

"We may well come to look back on the 1983 Budget not only as the one which finally marked the end of high tax rates in the UK... but also as the Budget which marked the end, at long

last, of the second-class status of married women," he says.

Tax Reform: the Government's Record. Conservative Political Centre, 32 Smith Square, London SW1P 3HZ. £1.75.

• The majority of British families pay more in tax and national insurance contributions than they did in 1979, in spite of subsequent cuts in income tax rates, Mr Gordon Brown, Labour's treasury spokesman, claimed yesterday, writes Michael Cassell.

Mr Brown, who said that all his information came from figures supplied by the Government in parliamentary answers, said the average family would this year pay 38.9 per cent of its total income in taxes and contributions, against 35.6 per cent in 1979.

The average earner, he added, was now paying £41 a week in income tax, £32 in national insurance contributions and £32 a week in VAT, excise duties and other indirect taxes.

Mr Brown claimed that only the top one per cent of wage earners had seen their tax burden sharply reduced. Cuts at this end of the income league had been worth an average £20,000 a year and the share of income paid in taxes had fallen by anything between 10 per cent and 40 per cent.

Lombard, Page 23

Short Bros wins orders for aircraft parts in US

By Michael Donno, Aerospace Correspondent

SHORT BROTHERS, the Belfast aerospace group, has won work worth between £20m and £40m as a result of recent big orders from US and other airlines for Boeing aircraft and for Rolls-Royce jet engines.

More than 200 Boeing 757, 737 and 747 airliners worth several billion dollars collectively have been ordered by US and UK airlines and by the US-based International Lease Finance Corporation. Short's share of these deals will include work on inboard trailing-edge wing-flaps for the Boeing 757, undercarriage doors for 747s and rudders for the 737s.

In addition, Short will share orders for Rolls-Royce RB-211-535 engine mountings and casings for the 50 firm and 50 optional 757s for American Airlines, and possibly also for RB-211-524s for the Boeing 747-400s ordered by ILFC.

Mr Roy McNulty, managing director of Short, said the company's work on airframe parts had been inconspicuous. But with forecast aircraft demand indicating strong growth, contracts with Boeing and Rolls-Royce demonstrated the benefits of applying their expertise in making and designing complete aircraft to production of high-technology components.

Compact disc player sales soar

BY TERRY DODSWORTH, INDUSTRIAL EDITOR

THE UK market for compact disc players soared to almost 1m units last year, comfortably replacing the video cassette recorder market as the fastest-growing sector of consumer electronics sales.

The sharp rise in demand, up about 38 per cent on 1986, puts compact discs alongside video cassette recorders and colour televisions as one of the most successful products ever in the household electronics industry.

It also adds to the UK's deficit in consumer electronics at a time when the Government's policy of encouraging inward investment from Japan was beginning to reduce the imbalance in other electronic products.

Sales figures take into account both stand-alone CD players and combination units included in music centres. According to the British Radio and Electronic Equipment Manufacturers' Association, trade shipments of separate players amounted to 737,000 units last year against 438,000 in 1986 and only 147,000 in 1985.

Estimates of combination player sales made by the BIS MacKintosh market research group amount to around 250,000 units, taking the total market to not far short of 1m, with a retail value of approximately £220m.

Virtually all of these products were imported. There are no UK manufacturers in the industry, which is dominated by Philips of the Netherlands, with about 50 per cent of the market, and Sony of Japan with 12 per cent. All the other leading companies are Japanese and of these only Aiwa manufactures in the UK.

The surge in CD player imports comes at a time when UK-based television manufacturers have managed to break into trade surplus for the first time since the early 1980s.

Despite the fact that all British-owned TV manufacturing ceased last year with the sale of Thorn EMI's Ferguson subsidiary to Thomson of France, the rise in the production from Japanese-owned plants in the UK pushed up exports to £208.6m last year, just £400,000 more than imports.

For consumer electronics producers, the upturn in CD player sales coincides fortuitously with stagnation in the video cassette recorder sector.

According to the association, VCR shipments rose by only 2.2 per cent in 1987 against 30 per cent the previous year, reaching 2.2m units. Manufacturers have also been hit by a sharp price drop in VCRs. At present, 54 per cent of UK households own a VCR and experts believe the market will be saturated when it reaches the 70 per cent level.

Two Liverpool firms of solicitors merge

BY IAN HAMILTON FAZEY, NORTHERN CORRESPONDENT

TWO OF Liverpool's oldest firms of solicitors - each a specialist in particular commercial legal areas - have merged to create a more broadly based practice that will further strengthen the north of England's autonomy in professional services for industry.

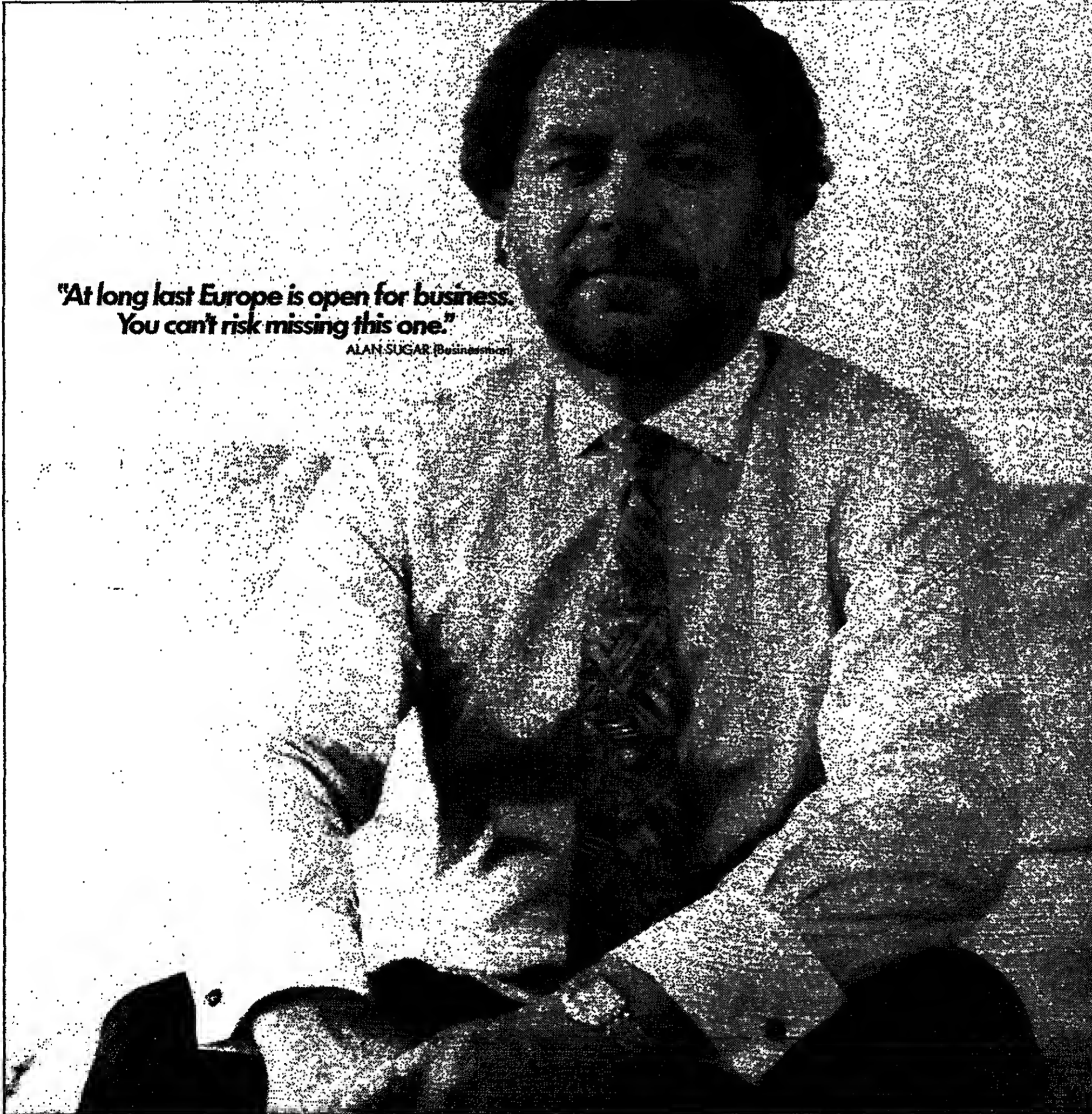
The new firm, Weightman Rutherford, combines Weightman's shipping, litigation, insurance and rapidly growing professional indemnity business with

Rutherford's expertise in employment law and alcohol licensing. Weightman dates back to 1860 while Rutherford's origins have been traced to 1829.

Shipping, insurance and brewing remain major industries and employers in the north-west. Although the practice's most famous client is a smaller business, Liverpool Football Club, for which Rutherford acted for many years, Mr Tony Ennor,

vice-chairman of the new practice, is a Liverpool FC director.

The chairman of Weightman is Mr Ron Bradshaw. Weightman Rutherford has 22 partners, 11 other qualified solicitors and 130 staff. Coupled with its specialities, this puts it in a similar league to about a dozen other emerging legal firms in Merseyside, Greater Manchester and Yorkshire which have grown or merged recently.



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the department for Enterprise

APPOINTMENTS

Regional general manager for NatWest division

Mr Don Anderson has been appointed a regional general manager in NATIONAL WESTMINSTER BANK'S domestic banking division. Regional executive director for outer London regions since 1987, he joins Mr Hugh Jones and Mr Gordon Lane as head office-based regional general managers responsible for controlling the bank's new regional structure.

Mr David Firth has been appointed company secretary of WESTERN MOTOR HOLDINGS. He was financial controller.

DRINKMASTER, a subsidiary of British, has appointed Mr Lee Cummins as chairman. He replaces Mr Michael Walker, who is retiring but remains an executive director of Initial.

SCM CHEMICALS has appointed Mr James Hancock as a director and general manager responsible for the pigments business operation from the UK. He was works manager, Chloride. Mr Stuart D. Esler has been appointed sales and marketing director. He joins from the company's Australian operation.

ALEXANDER STENHOUSE has appointed Mr Terry Miles as an associate director, international department.

MILES 33 has made the following appointments: Mr Nick Jones becomes managing director; he was legal systems division director. Mr Roger Miles Holland, the company's founder, relinquishes his post as chairman but remains a director. Mr Jon Richards, formerly managing director, becomes chairman. He is on the board of parent company UEL and chairman of Miles subsidiaries Pagtek and Databest. Mr Donald Sullivan, president of the US subsidiary, joins the board. Mr Tom Bucka becomes legal systems director. He was director of sales and marketing of the legal systems division.

Mr David G. Tree has joined the board of HIGH-POINT SERVICES GROUP as a non-executive director. He is a director of SBCL Savory Mill's corporate finance department, where he specialises in the construction industry.

GIBBS HARTLEY COOPER, Lloyd's broking subsidiary of The Hongkong and Shanghai Banking Corporation, has appointed Mr Mike Bishop as joint managing director of its reinsurance division and Mr Keith Walker as a director. They will be joined by Mr Morley Speed as a director on July 1. They all join from Golding Stewart Wrightson, recently acquired by Willis Faber.

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BRUSSELS • CATANIA • COPENHAGEN • EDINBURGH • ESSEN • FRANKFURT • GOTHENBURG • INNSBRUCK • ISTANBUL • JERUSALEM • LIMASSOL • LISBON • LONDON (BELGRAVIA, HEATHROW, PARK TOWER, SKYLINE) • LUXEMBOURG • MADEIRA • MUNICH • OSLO • PADUA • PALMA DE MAJORCA • PORTO • ROME • SALZBURG • SOFIA • STOCKHOLM • TEL AVIV • ZURICH

1988 THE SHERATON CORPORATION

"I'VE LEFT MY UMBRELLA IN A TAXI."

To be fair, our American guest did give us a clue.

"It's a Mercedes," he told us. No kidding. Just like the other 999 taxis cruising the streets of Jerusalem.

In such circumstances, the majority of staff in the majority of hotels might, understandably, have offered sympathy and very little else.

Fortunately for the owner of the broly, he was staying at the Sheraton.

And although the odds of finding a needle in a haystack were slightly shorter, this didn't deter our doorman.

To him, the lost umbrella came as a personal challenge.

With the chances of finding it slim by anyone's standards, he was on the case.

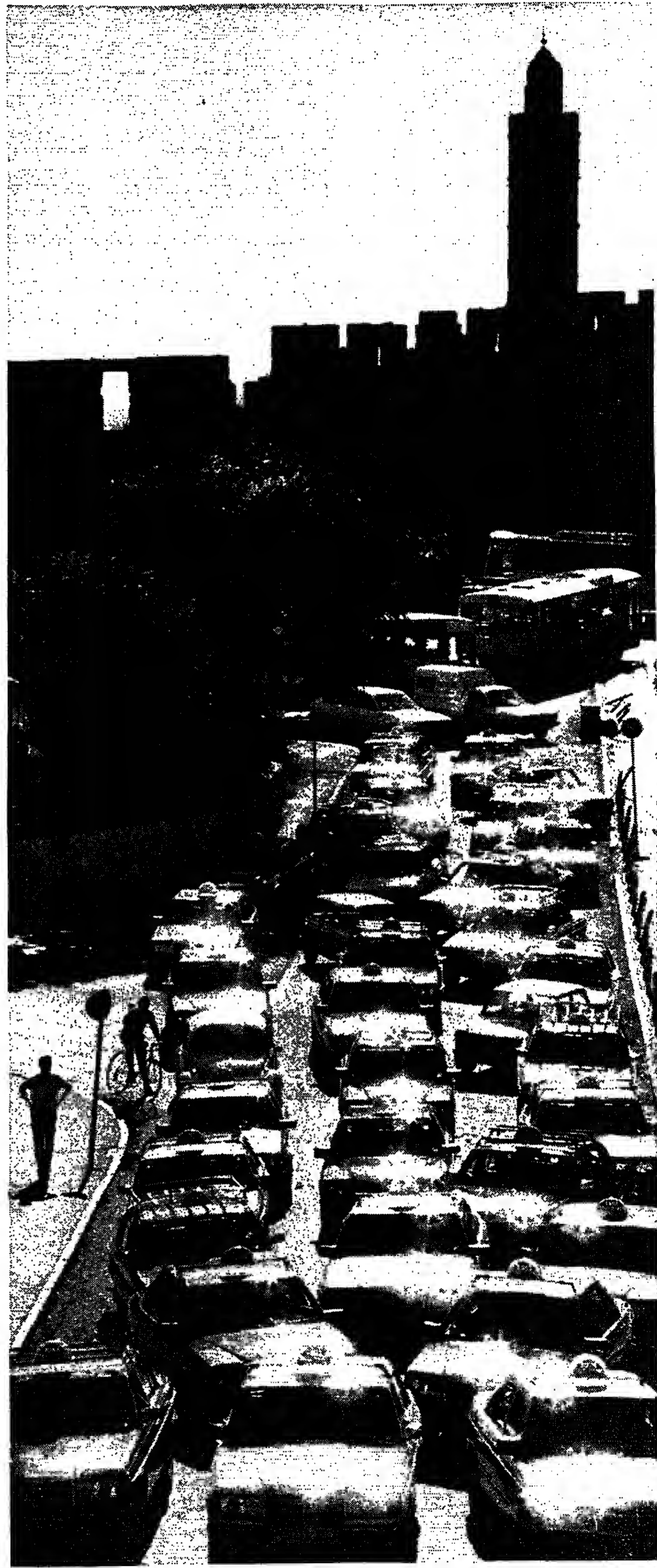
Two days later, the taxi was located and the broly returned to its incredulous owner.

At Sheraton, we have a training programme for all our staff which aims to impress upon them our idea of service.

We've summed it up as 'Little things mean a lot.'

It would appear that the doorman from the Jerusalem Sheraton, for one, has got the message.

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1888-1988

A CENTENARY EVENT FOR READERS OF THE FINANCIAL TIMES

THE QUEEN ELIZABETH II CONFERENCE CENTRE
WESTMINSTER, LONDON

7, 8 & 9 JULY, 1988

As part of its Centenary year, the Financial Times is pleased to announce **Personal Investment 1988**. An Exhibition for those seriously interested in investment, it will provide an opportunity for its readers to discuss their individual personal financial planning requirements and take part in the exciting programme of events that will contribute to this celebratory occasion.

for you and a guest, a catalogue and the opportunity to visit the FT Centenary Photographic Display and a special show of paintings by the New English Art Club.

Those attending the Exhibition will also be able to register for any of the associated conferences, workshops and events listed below. At £10.00, the cost of each is attractively low but numbers are restricted and early booking is essential.

Entry to the Exhibition costs £5.00 which includes a ticket

PROGRAMME OF EVENTS

Thursday, 7 July
10.00 - 13.15 **OPENING CONFERENCE - CAPITAL PROTECTION AND GROWTH**
Financial planning for men and women in later career and at retirement.
Sir Mark Weinberg
Chairman, Allied Dunbar Assurance
Deputy Chairman, Securities & Investments Board
Gordon Peppers
Director & Senior Adviser, Midland Mortgage
Alan Kelly
Partner, Grant Thornton
Author, 'Financial Planning for the Individual'
John Patterson
Director, National Savings
Michael Plich, CBE
Former Director, Noble Lowndes
Former Chairman, NAPP

14.00 - 17.15 **PERSONAL FINANCIAL PLANNING AFTER THE 1988 BUDGET**
An overview of the income and capital changes in the most recent Lawson Budget and suggestions on the financial and investment decisions that follow.
Lord Bruce-Gardyne of Kirkcaldy
Former Economic Secretary to the Treasury
David Stewart
Senior Tax Partner, Deloitte Haskins + Stott
John Chivers
J F Chivers & Co
Hugh Blackway Webb
Tax Partner, Deloitte Haskins + Stott

18.00 - 20.30 **PERSONAL PENSIONS**
A subject of immediate importance to men and women in employment as the new pensions regime takes effect in July. An authoritative panel looks at the risks and possible rewards of leaving employer-run schemes.
Dryden Gilling-Smith
Managing Director, EBS Management
Maurice Oldfield
Former President, NAPP
Group Pensions Executive, Allied Lyons
Robert Ashurst
Partner, R Watson & Sons
An insurance company speaker to be announced

18.00 - 19.30 **INVESTING IN GOLD**
Should gold play a bigger part in the portfolios of British investors? A distinguished panel will answer the question and discuss how to proceed.
Robert Guy
Director, N M Rothschild & Sons
Julian Baring
Gold Specialist, James Capel
Anthony Garrett
Deputy Master & Comptroller, The Royal Mint

Friday, 8 July
10.00 - 13.15 **CAPITAL PROTECTION AND GROWTH FOR DIRECTORS AND SENIOR EXECUTIVES**
Personal investment strategies for men and women at the top of companies and with businesses of their own.
The Rt Hon Cecil Parkinson, MP
John Forsyth
Director, Morgan Grenfell
Barry Riley
Investment Editor, Financial Times
Tony Vernon-Harcourt
Author, 'Charterhouse Guide to Top Management Remuneration'
Dryden Gilling-Smith
Managing Director, EBS Management

10.00 - 13.15 **WORKSHOP FOR EXPATRIATES**
A special workshop on the requirements of men and women living abroad.
Peter Garland
Editor, The Internationalist
Peter Donald Davis
Managing Director, Abbey National (Overseas)
John Critchenden
Manager, Expatriate Services, Lloyd's Bank
Donald Eldon
Director, Wilfred T Fry (PFF)

14.00 - 17.15 **ALTERNATIVE INVESTMENTS**
An examination of areas of interest to collectors including discussions of market trends by Sotheby's directors, chaired by one of the principal contributors to the BBC Antiques Road Show.
Lecturers: **Simon Taylor**
Christopher Payne
David Bennett
David Bettle

18.00 - 19.30 **SOTHEBY'S WINE TASTING**
This is a fascinating opportunity to join a tutored tasting of investment quality wines. Numbers are limited and early application is essential.
Tutor: **David Moynaux-Barry MW**
Head of Sotheby's Wine Department
Introduced by: **Edmund Penning - Rowsell**
FT Wine Correspondent

17.00 - 18.30 **REVIEWERS' EVENING**
Offered on a complimentary basis to a limited number of readers, this distinguished panel will be chaired by the FT Literary Editor.
Contributors: **Tony Curtis**
Francis King
Rachel Billington

Saturday, 9 July
10.00 - 13.00 **CAPITAL PROTECTION AND GROWTH FOR THE YOUNGER INVESTOR**
Designed for men and women planning an investment strategy for the longer term.
Richard Lambert
Deputy Editor, Financial Times
David Bettle
Director, Sotheby's
John Brennan
FT Property Correspondent
Hugh Llewellyn
Bailey Shalpin
Speaker on Personal Pensions to be announced

14.00 - 17.15 **INTRODUCTION TO INVESTMENT**
The Stock Exchange and its three markets, unit linked investments, high street developments and investor protection are among the subjects to be covered.
John Edwards
Personal Finance Editor, Financial Times
Bark Bolcott
Director-General, Building Societies Association
Daniel O'Shea
Director, M & G Investment Management
Author, 'Investing for Beginners'
Ian Morrison
Group Corporate Affairs Director, Midland Bank
Colin Chapman
Editor, Financial Adviser
Speaker from The Stock Exchange invited

14.30 - 17.00 **"HOW TO SPEND IT"**
An afternoon with:
Lucia van der Post
(with a lot of help from Harrods)

11.00 - 12.30 **TASTING OF PINK CHAMPAGNE**
14.00 - 15.30
Two tutored tastings of pink champagne with sparkling examples from leading houses.
Tutor: **Robert Joseph**
Publishing Editor, 'Wine' Magazine

EVENING CRUISE TO GREENWICH AND SYMPHONY CONCERT
A limited number of tickets are available, at £20.00 each, for a boat trip from Westminster to Greenwich for a symphony concert by the NCOOS Symphony Orchestra with Anna Steiger as soloist and with the German conductor Volker Wenzel.
Programme: Wagner Overture: Ranzl
R Strauss Oboe Concerto Soloist: Donovan Rihou
Dvořák Song to the Moon and Russalka
Elzot Carmen: Suite and Michael's Aria
Granados The Lover and the Nightingale from Goyescas
Mussorgsky arr. Ravel Pictures at an Exhibition
The National Centre for Orchestral Studies has been favourably reviewed by the FT and the NCOOS is moving into its new home in Greenwich Borough Hall. Return transport is provided.

A FINANCIAL TIMES CENTENARY EVENT GROUP SPONSOR: Midland Bank plc ASSOCIATE SPONSOR: The Royal Bank of Scotland plc

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PERSONAL FINANCIAL PLANNING AFTER THE 1988 BUDGET	<input type="checkbox"/> @ £10.00 = £	WORKSHOP FOR EXPATRIATES	<input type="checkbox"/> @ £10.00 = £
PERSONAL PENSIONS	<input type="checkbox"/> @ £10.00 = £	ALTERNATIVE INVESTMENTS	<input type="checkbox"/> @ £10.00 = £
INVESTING IN GOLD	<input type="checkbox"/> @ £10.00 = £	SOTHEBY'S WINE TASTING	<input type="checkbox"/> @ £10.00 = £
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PERSONAL INVESTMENT 1988		GRAND TOTAL	
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FINANCIAL TIMES SURVEY



The glamour of the Riviera is only part of the picture. In the past few years, southern France has modernised

its economic base and transformed its image. This four-page survey by Paul Betts looks at a region which now faces new challenges and opportunities

Sunbelt at a crossroads

THE SOUTH of France seems to be following the Californian model. Long associated with the image of sun, sea and sex, it is now starting to acquire the allure of a high-tech economic sunbelt. From Nice and the tiny principality of Monaco to Marseilles and west to Montpellier and Toulouse, new high technology enterprises and science parks have been mushrooming during the last few years. With them have come a score of new service industries which have helped diversify and broaden the economic base of southern France.

The traditional economic sectors of this large region have also been undergoing a profound, if at times painful, transformation. Around Marseilles, where the bulk of the region's traditional industrial activities have long been centred, the steel and petrochemical industries have had to adapt to a changing and increasingly difficult international economic environment.

The French government's ambitious design in the 1970s - to create a major steel industry focused around Fos, west of Marseilles - was never completed in the face of the crisis which swept the European steel industry. But Fos today remains the most important oil refining and petro-

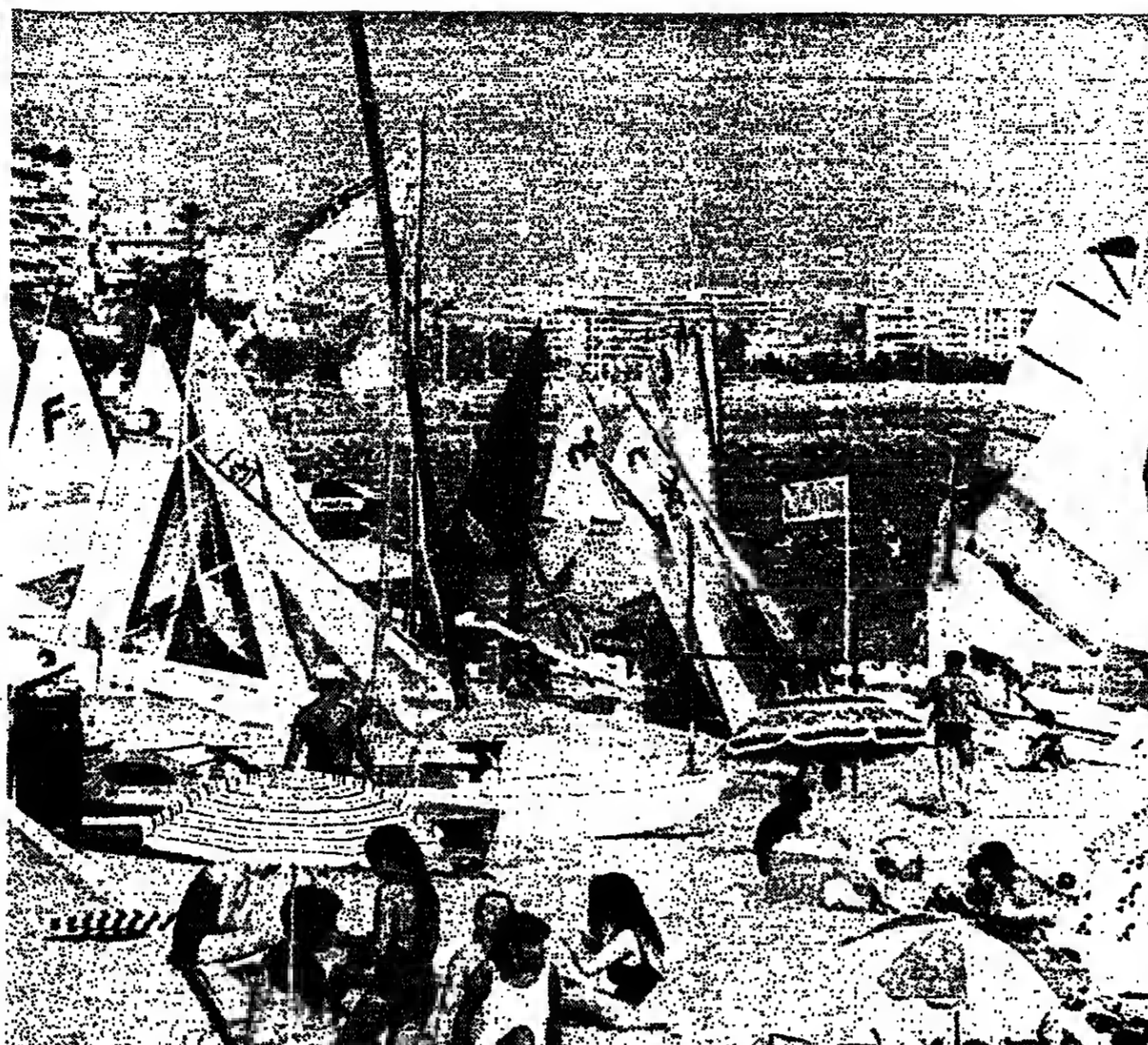
chemical complex in the Mediterranean served by the port of Marseilles, the second largest in Europe after Rotterdam.

Even though the future of two of the four big refineries in the Marseilles basin is clouded, two major international oil groups, Shell and BP, have recently deployed major new investments in the area. Atlantic Richfield, the large Californian-based oil group, has also invested in a \$2.5bn new facility in the area to produce additives for the new market for lead-free petrol in Europe.

If the local textile and food processing industries have also suffered and the shipyards of La Ciotat are closing down, the region has managed to diversify its economy into new service and industrial sectors to offset the decline of the traditional industries.

IBM was among the first to choose southern France for major industrial and research facilities. The American computer giant manufactures its large mainframe computers at Marseilles and picked the area above Nice for one of its most important telecommunications research facilities in Europe.

Other high tech companies have emigrated to southern



Southern France AND THE Riviera

France. The science park of Sophia Antipolis between Nice and Cannes has become the home of several major French and international groups. Aix-en-Provence is an important semiconductor centre. Marseilles is building its own science park to capitalise on the heavy concentration of national and private research laboratories in the area. Montpellier is developing an international reputation for agricultural and medical research, while Toulouse has become the aerospace capital of France.

Tourism and agriculture, two

of the traditional backbones of the economy of southern France, have also been adapting and modernising themselves to changing economic circumstances.

In the Languedoc-Roussillon and the Provence-Cote d'Azur areas, wine-growers have been investing to improve the quality of their wine and have made a major effort to develop new export markets to compensate for the decline in wine consumption in France and the pressures from Brussels to reduce production of cheap local table wines.

It has not been without pain as the regular popular demonstrations of anger and frustration of the local wine growers continue to illustrate in eloquent fashion.

The enlargement of the European Community with the entry of Spain has provoked considerable anguish in the region's agricultural community. But it has also provided them with a challenge to accelerate the modernisation and transformation of this traditional and politically influential sector.

For decades, the South of France relied on the winter sea-

son for the bulk of its tourism. This has now changed and the summer has become the main season. But sun and sea, and a glamorous image, are no longer sufficient to sustain tourism on the Riviera and elsewhere in the Midi. Cheap air travel has opened up new far-away resorts to mass tourism and eaten into the traditional tourist sector of southern France.

But the region has invested heavily to build up a diversified and all-year tourist business. It has developed new ski resorts in the Alps and a thriving business

CONTENTS	
Marseilles The "technopolis"	2
Nice and the Riviera The story of Ferrier	3
Monaco	
Tourism Wine-growing	4
<input type="checkbox"/> Beach at Cannes photographed by Ashley Ashwood	

convention sector. Major investments have been deployed along the Languedoc-Roussillon coast as well as on the Riviera, while the major cities of the area have invested in new facilities to attract the increasing number of short-stay and business visitors to the region.

All this would not have been possible without major infrastructure investments to support the evolution of tourism and the diversification into new business and industrial sectors. Southern France has a number of important international airports at Nice, Marseilles and, to a lesser extent, Montpellier, which have all been engaged in substantial investment programmes to double their capacity.

Good international air connections have undoubtedly played a fundamental role in bringing international investment and companies to the area, attracted by the high quality of life of the Midi. Some of the American companies claim that their productivity has increased by as much as 30 per cent since they established themselves in the south of France.

Transport infrastructures have been boosted by new motorway networks and the arrival of France's famous "train à grande vitesse" (TGV), the high speed trains which link Paris with Marseilles, Montpellier, and now Nice. One day, these trains will run directly to the northern part of Europe and to the Channel Tunnel at Calais. The TGV has cut the journey to Paris to around five hours.

The region now hopes that a high speed train link will eventually connect Milan to Barcelona through the South of France, opening up new business opportunities for the area. Indeed, many local businessmen have established increasing contacts and links with Italy on one side and Spain on the other in anticipation of the prospects which the single European market will bring to their activities and to the region in general.

Southern France is likely to find itself at a new central crossroads after 1992. "This region was regarded as the south of Europe. Now it is likely to become the centre of Europe," remarked Mr Raymond Barre, the former French prime minister often described as the best economist in France, while he was campaigning in the Midi during the recent French presidential election.

But if southern France has succeeded in adapting its economy during the past few years, gradu-

ally transforming and modernising its image, it nonetheless continues to face some complex hurdles which it will have to overcome if it is to succeed in completing its evolution in time for the single European market deadline. The biggest and most immediate challenge is perhaps not an economic one, but a political one.

During the past few months, the Midi has captured the national headlines in France because it has emerged as a bastion of Mr Jean Marie Le Pen, the blond bombastic leader of the French National Front. Even before the recent presidential election, Mr Le Pen had won increasing popular support in many parts of a region, whose political evolution has seen it gradually move from the left to the right.

In the first round of the presidential election, Mr Le Pen made some of his most impressive scores in the south, provoking, in his own words, "a political earthquake." In cities like Marseilles, Mr Le Pen scored nearly 30 per cent of the vote, coming ahead of all the traditional right-wing candidates.

His breakthrough in the south is explained by many factors. The large concentration of Arab immigrants, alongside a high proportion of pensioners and old people in the area, has clearly played in his favour. Moreover, he has also found fertile support among the French expatriates from Algeria, the so-called "pieds noirs," who settled in the south after Algerian independence.

The crisis in traditional industrial sectors and the collapse of the Communist Party in the region has further channelled votes from disgruntled and disillusioned electors to Mr Le Pen. Indeed, one of the characteristics of the rise of the National Front in France in recent years has been the parallel decline of the Communist Party, once a strong political force in many key parts of the region. And it seems that many former Communist voters have been attracted to the National Front.

During the presidential election campaign, Mr Le Pen managed to gather in the Marseilles football stadium a cheering crowd of some 20,000 supporters. He has now decided to run in the French legislative elections in Marseilles to try to win a parliamentary seat as a first step towards a bid for the city's town hall in next year's municipal elections.

In other parts of the south, the

Continued on page 4

Message from southern France

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Marseilles's Industrial drive: traditional industries are leaping into the hi-tech age, its powerful petrochemical potential is expanding, its lead in aerospace activities is gaining international recognition, while state of the art activities are blooming.

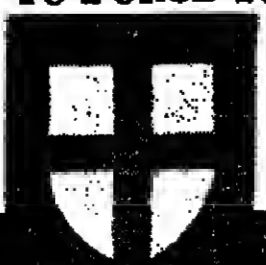
Marseilles's Scientific and Technological assets include 5 universities, some fifteen colleges, over 100 research units. Marseilles hosts leading-edge scientists and successful firms, responsible for major breakthroughs in various sectors: laser, ocean engineering, genetic engineering, information technology, "chips", biotechnology, artificial intelligence, robotics, and what not...

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SOUTHERN FRANCE 4

Tourism, the region's backbone, is adapting to changing tastes

Getting away from the coast

EVER SINCE the British and the Russian aristocracy discovered it in the 19th century, the South of France has enjoyed a reputation as one of the world's leading tourist spots. "It is undoubtedly a star and like all stars it has its qualities and its faults," remarks Mr Dominique Charpentier, head of the regional tourist bureau in Nice, sitting in his office overlooking the Promenade des Anglais.

become even more acute with the development of low cost air travel which has opened up to mass tourism distant sand and sun resorts in the Caribbean, the Pacific and Indian Oceans. Despite the increasingly competitive environment and the changing tastes and habits of consumers, the South of France has successfully managed to adapt its tourist sector which remains one of the backbones of the regional economy.

restoring them to their former splendour while incorporating all the facilities of a modern hotel. Transport infrastructures have played a major part in the development of the business convention activity as in that of the mainstream tourist business of the area. The international airport of Nice has played a particularly significant role in supporting tourist business as well as attracting foreign investment.

Other factors include the extension of the motorway network and the high speed TGV train service between Paris and Marseille, which now also runs to Nice although not at top speeds because of the difficulty of adapting the railway track along the coastline.

Monaco

New image for a city state

THE WRITER Somerset Maugham described Monte Carlo as a sunny place for shady people. But that was long ago and things have moved on since then. Prince Rainier told me last year that he would like to be remembered one day as the man who corrected the bad image and legends of his tiny sovereign state. For generations, the picture postcard principality has been regarded as a tax haven and gambling paradise with its famous casino and luxury hotels attracting grand dukes and Greek shipping tycoons.

much as 95 per cent of the country's annual receipts. During a recent visit, two crocheters were lamenting that even the wealthy Arabs had now deserted the green tables and that all the big business was in Las Vegas-style slot machines. These days, the biggest contribution to the FF2bn annual state budget comes from value-added tax receipts which account for as much as 50 per cent of revenues.



Prince Rainier (left) with President Mitterrand of France

its. By comparison, lending activity has been limited and the principality has not so far developed into a significant offshore banking centre, as the Monegasque authorities would wish. The decision rests with France, since Monaco comes under the jurisdiction of the Banque de France and its foreign exchange controls.

The Greek shipowners were among the first to take advantage of the tax system to set up Monaco-based entities to manage and administer offshore companies. Since then, other industrial, commercial and trading groups have been attracted to Monaco to set up management bases.

Banking and financial services have also been growing steadily in the principality. There are now more than 30 different banking institutions in Monaco including virtually all the big international names in investment and commercial banking.

Monaco has traditionally been a major centre for foreign depositors.

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Expanding in Monaco

Monaco provides interesting opportunities for foreign companies and individuals but expert help can ease the problems of entering or expanding into a new market place. Operating in a new business environment with different laws, currencies, cultures and, perhaps, language adds new dimensions to business activity.

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Wine-growing

Nice rosé turns more aggressive

THE MIDI, as the South is known in France, has always been a prolific wine producer. Wine has for generations been an integral part of the culture, politics, history and economy of a region where a great many people still own a few acres of vines and devote their weekends to tending their grapes.



Cleaning a wine slurry out near Perpignan

A very large proportion of wine-growers in the Midi are not full-time wine producers. A recent study showed that of the 74,000 wine-growers of both the Languedoc and the Provence-Côte d'Azur regions supplying local co-operatives, only 44 per cent relied entirely on this occupation for their livelihood.

Sunbelt at a crossroads

Continued from Page 1. traditional parties of the right have had to make local political alliances with the National Front to retain power. And these associations have inevitably helped the extreme right-wing party to gain a measure of respectability and credibility in the area.

and their own government. But they have become increasingly alarmed by the EC's efforts to reform its costly wine regime and curb production.

The traditionally militant wine-growers of the Midi were again up in arms a few weeks ago following the latest plans from Brussels to introduce a more restrictive price regime. To appease them, the government extended some additional hand-outs to French wine-growers by introducing measures designed to reduce the subsidy at a meeting in Paris organised by Var wine-growers to promote their different wines.

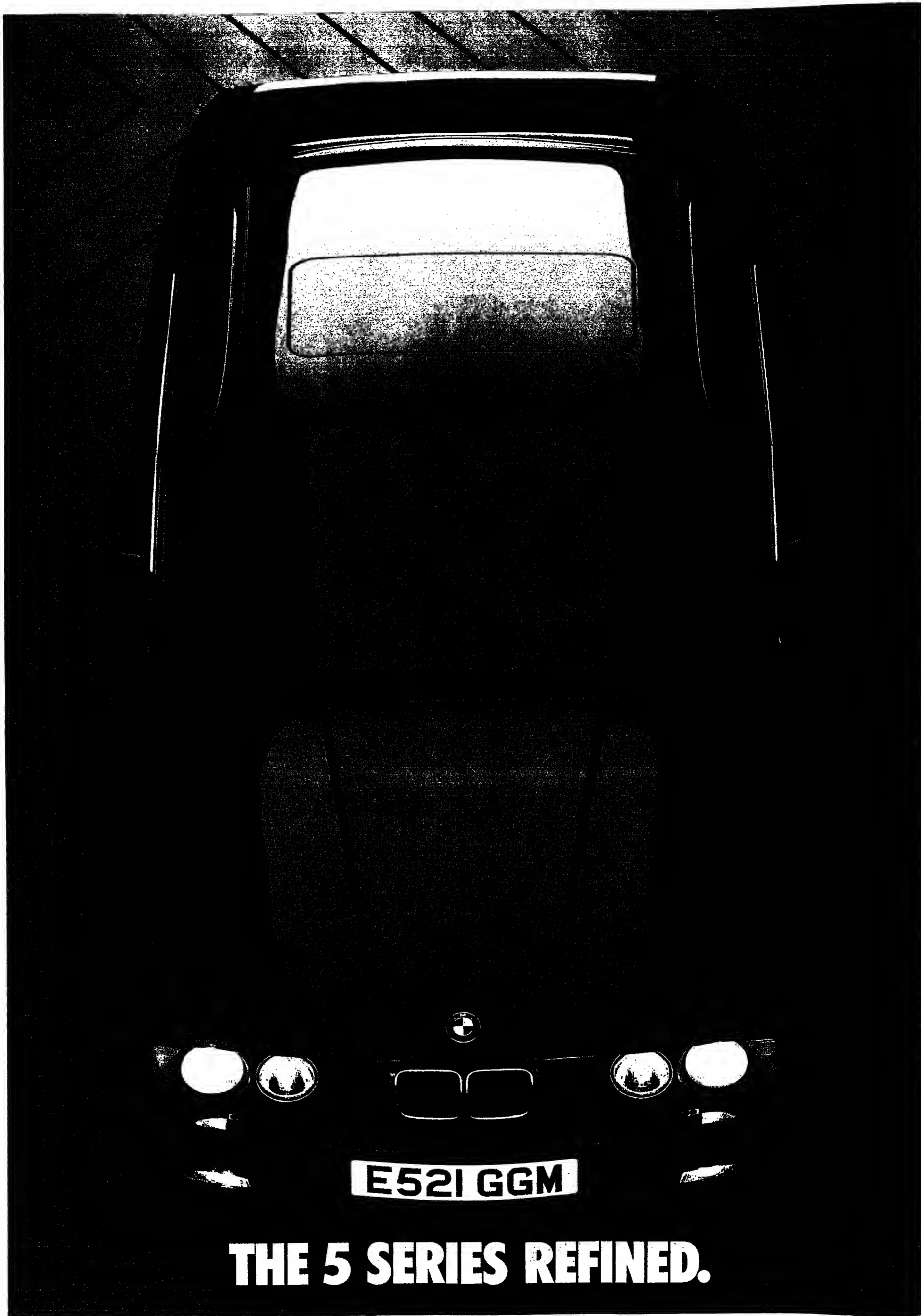
Although prospects remain uncertain for the region's wine industry, some recent efforts to improve quality and marketing are starting to pay. In the Var, for example, the growers have now forged closer ties to launch a major marketing campaign to improve the international image of the wines of Provence.

"We've always been stuck with the image of the nice little rosé served well chilled in the summer," remarked one grower from the St Tropez area at a meeting in Paris organised by Var wine-growers to promote their different wines. "Production is now becoming much more professional and the Var is producing increasingly good quality wines. And there is no reason why we cannot try to market our wines as successfully as the people in the Beaujolais have done in recent years," he added.

Since the growers organised themselves more coherently and efficiently, wine exports from the Var have doubled. Perhaps even more significantly, this particular area has attracted increasing interest from foreign investors. Between 20 and 25 wine-growing estates have been acquired recently by a wide range of foreign investors from West Germany, Belgium, Denmark, Sweden, the US and Japan.

The wine-growers of the Midi, who have always had an important and vocal voice in the politics of the region, have also relied heavily in the past on support from the European Community

to create a democratic front to prevent Mr Le Pen from gaining further ground in the south. It is no accident that Mr Bernard Tapie, the French entrepreneur who has built up a business empire by taking over and turning around bankrupt companies, has decided to run in the parliamentary elections in Marseille. Mr Tapie, a popular figure in the city since taking over the local first division football team, declared that he decided to enter the political contest to counter the local ambitions of the National Front. His decision to run also reflects Mr Mitterrand's and the Socialist Party's efforts to extend their electoral base to the centre.



E521 GGM

THE 5 SERIES REFINED.

Neither of these tasks was an easy one.

The current 5 Series, though six years old, includes the world's fastest four door production saloon.

And as for producing some new form of performance saloon, could BMW engineers triumph where others have not?

Frankly, it would appear that they have.

Motoring journalists have not only been unstinting in their praise of the new 5 Series, but also unanimous.

It is no mere facelift. The designers began with a blank sheet of paper.

And not one body panel is carried over from the previous model.

STYLED BY WIND, AS MUCH AS BY HAND.

The new car has a drag coefficient as low as 0.30. With even the floor pan shaped, to provide increased grip at speed.

But though BMW reduced the car's wind resistance, they succeeded in retaining its character. As 'Car' magazine reported:

"...its styling is modern, purposeful and yet unmistakably BMW."

Some credit for the car's appearance must go to those who engineered the chassis. Its wider track, longer wheelbase and lower centre of gravity give the car a sleek low look.

They also contribute to the car's near perfect balance and behaviour.

Back to 'Car' magazine.

"In this class no other saloon offers a better blend of ride, roadholding and handling."

THE INTERIOR IS AS CLASSICALLY BMW AS THE EXTERIOR.

The dashboard is unashamedly driver-orientated. Without a single garish liquid crystal gauge in sight.

They may be fractionally more efficient in reacting to information, but BMW judge them rather less efficient in communicating it.

'Motor' obviously concurs. "Bereft of styling excesses and gimmicks, the display stands as an example of design purity and clarity."

"The 520i's fascia brings new realism to the term 'carved from solid'. It looks superbly integrated and beautifully assembled from high-grade mouldings."

Of course, BMW have long been praised for their build quality. A reputation they were not about to compromise.

So, despite the trend to build less and less substantial cars, BMW have constructed a more substantial one.

400lbs heavier, the new 5 Series has a bodyshell over 40% more rigid than the previous model. Stiffness that is an aid to swiftness, as 'Motor' found.

"The car's immensely strong rigid bodyshell also allows it to sail over large crests and dips with a feeling of great integrity. There's very little excess

body movement: control is simply terrific."

Braking is equally sure.

There are ventilated disc brakes all round. The largest of any car in this class, they operate via a powerful new vacuum servo.

And from the 525i, every member of the new 5 Series has the added benefit of ABS.

SO MUCH FOR THE 'STOP'. NOW ON TO THE 'GO'.

The new 5 Series is powered by what is widely acknowledged as the smoothest range of six cylinder engines in existence.

It begins with a tax efficient two litre. And even this is capable of propelling the car at a somewhat academic 125mph.

Next is a 2.5. It develops maximum torque at just 4,300 rpm. Making the 525i particularly adept at motorway overtaking.

Thirdly, there is a 3 litre that develops an impressive 188bhp.

And at the top of the range, a 3.5 that will take the car from 0 to 60mph in just 7.7 seconds.

All four are fuel injected. And they each incorporate a computerised engine management system that constantly 're-tunes' the engine for optimum performance.

The car will also calculate its own service intervals. And memorise any engine fault, no matter how fleeting, then report it on its next visit to a BMW service bay.

But it is the engine's performance not its practicality that will attract the keen driver.

It certainly attracted the man from 'Motor'.

"Throttle response is super-crisp and entirely consistent but most impressive is undoubtedly that superlative mechanical smoothness."

Excellent though the individual components of the 5 Series are, it was the car as a whole that impressed 'Motor' most.

"Its real achievement is in the completeness of its abilities, its depth of talent. BMW's standards appear to march forward irrespective of model range or price."

Over the last 4 years BMW invested 4 million man hours in the development of this new 5 Series. And they drove prototype cars and tested components over 2.9 million miles.

(The equivalent of driving around the world one hundred and sixteen times.)

The car that has emerged packs more advanced technology per square inch than any BMW before. Driving it, however, provides some good old-fashioned rewards.

"The 525i is sporty and civilised, fast and economical, well put together and relatively affordable, comfortable and fun to drive."

"This is a sports car dressed as a family saloon, a driving machine which does not sacrifice creature comfort."

These paragraphs represent 'Car's' verdict. BMW now await yours.



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MANAGEMENT

THE STEEL industry of Lorraine has proved an unusually fertile training ground for the French luxury goods industry. Not one, but both the joint heads of LVMH – the Louis Vuitton Moët Hennessy champagne, perfume, luggage and cognac group – emerged from industrial careers among the blast furnaces of France's north-eastern steel belt.

Henry Racamier was 65 when he left the steel industry in 1977 to take over the management of Louis Vuitton. In ten short years he transformed the old established family company specialising in high quality luggage into a major international group in the luxury products market. Alain Chevalier, a product of France's elite *Ecole Nationale d'Administration* (ENA), which has groomed generations of top French civil servants and politicians, had spent six years with the Saclor steel group before he joined Moët to engineer the marriage between the champagne house and Hennessy cognac in the early 1970s.

The two men, long converted to the more glamorous and lucrative charms of the French luxury products industry, met exactly a year ago to consummate the marriage between the champagne house and Hennessy cognac in the early 1970s.

"The merger has gone very well because we have in both our former groups the same philosophy to this business," says the veteran but sprightly Racamier. "We have always sought to keep the independence of the different companies in our group. The luxury industry is a business based on brand names. Each marque must maintain its autonomy and personality and you must not mix their different images," he adds.

"There was never any question of one group absorbing the other," explains Chevalier. "We have always regarded our merger as a rapprochement getting gradually closer all the time."

Indeed, the group is a confederation of companies which are all leaders in their respective fields and held together by the new LVMH holding. With sales of FF 13,25bn (£1,25bn) and net profits of FF 1,34bn (£126m) last year, the group is the world's biggest champagne producer with Moët-Chandon and Veuve Clicquot and several other brands. It is also number one in cognac with Hennessy and Hinc, and a leader in perfumes and beauty products with Christian Dior, Givenchy and Roc. As for Louis Vuitton's traditional luggage and leather goods business, they have

Louis Vuitton Moët Hennessy
**'Getting closer all the time'
– but still independent**
Paul Betts examines the progress of a merger of two French luxury goods groups

become synonymous with jet set travel.

From the beginning, the merger was seen as a marriage of luxury and reason between the Moët-Hennessy and the Louis Vuitton groups. "The experience of the Moët Hennessy marriage showed that it could work," says Chevalier, the chairman of the new LVMH group who shares power at the top with Racamier, executive vice chairman and head of the holding's strategic committee. Chevalier says that in his 17 years as head of Moët-Hennessy he has never had to vote at a board meeting. "All decisions have been taken unanimously and have taken into account the opinions of the various majority shareholders."

The experience of Moët-Hennessy made the merger between Moët and Vuitton much easier and quicker to put together. Moreover, there was a twin defensive and offensive logic to the merger. At a time when the French luxury products industry has been swept by a wave of takeovers and business concentrations, Moët was anxious to consolidate the control of its capital to protect it from hostile approaches. With a current market capitalisation of about FF 26bn the new group has one of the highest Bourse capitalisations of any French company. "It makes us very expensive," says Chevalier. At the same time, the families now control about 36 per cent of the group's capital and 50 per cent of the voting rights.

Nonetheless, LVMH has continued to attract heavy takeover speculation on the Paris bourse. Last Wednesday, nearly 170,000 shares (there are just over 11m shares in issue, about a quarter of which are held by foreign shareholders) were traded after nearly 100,000 had changed hands the previous day. This compared to an average of about 25,000 LVMH shares normally traded on the bourse. The shares also hit a peak of FF 2,500 last week from less than FF 2,000 the week before.

The group has sought to pour cold water on the takeover rumours, claiming that the rise in the share price and trading



Alan Chevalier (left) and Henry Racamier: never a question of one group absorbing another

volume reflected the recovery of the stock after last October's stock market crash. Moreover, the company's financial prospects this year are very promising making its shares all the more attractive.

But the bourse is also speculating that a major group is buying into LVMH to accumulate a large minority stake. The names of Guinness and Grand Metropolitan in the UK, Seibu and Sunmory in Japan, the Agache group in France, as well as Unilever, the Anglo-Dutch toiletries and food group, have all been rumoured. There has also been speculation that one of the family shareholders of the group is attempting to consolidate his stake while the shares have also been boosted by LVMH's new acquisition plans in the fashion and wine sectors.

But if the LVMH marriage last year was designed to consolidate the group's defences against unwelcome approaches, it was also an offensive merger. By combining their respective financial means and developing the affinities and synergies between the various components of the new group, the merger has boosted the international competitiveness and development opportunities of the former Moët and Vuitton companies. While each company in the new confederation retains

doubled our sales in the US to around US\$ 500m a year," he says.

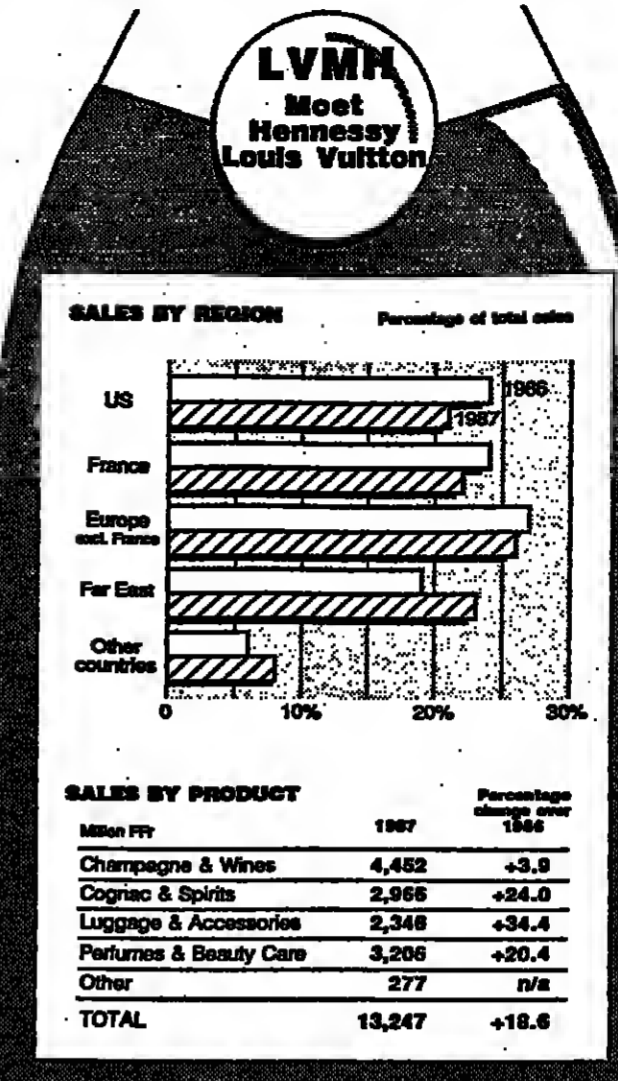
Moët and Guinness have since expanded their marketing association. But what is original is that the Moët-Hennessy products are distributed by a separate system to the Veuve Clicquot and Hinc cognac products to enable the different brands to pursue autonomous, competing sales policies.

There are not at present such obvious synergies in the perfume business of the new LVMH group. Chevalier says the various brands will continue to be run autonomously although the Givenchy perfume business, which came from Vuitton, will now clearly benefit from Moët's major research facility in biotechnologies, beauty care and horticultural products.

The merger has also significantly expanded the group's resources for future development and growth. Indeed, between negotiable securities and credit lines, the group can draw today on an instant financial war chest of about FF 4bn for acquisition opportunities. Racamier has been particularly studying the group's diversification and development strategy. "We are a global company with about 80 per cent of our turnover done outside France. But we are also a particularly French company with about 80 per cent of our investments in France," he says, explaining that the group now wants to increase its investments abroad, especially in Europe and the US.

Racamier is looking at opportunities to expand the group's activities into the haute couture business. "It is no secret that we have been discussing with the Givenchy fashion house for the past two years since we already own the Givenchy perfume business," he remarks – as well as diversifying into jewellery and watches and luxury table ware. He is also about to acquire a prestige name in the Burgundy wine business.

Japan, a key and highly profitable market, poses difficult psychological problems for the group's efforts to diversify its investments geographically. "I'm not so sure that we could sell a



Management abstracts

Avoiding the pitfalls in managing distribution channels. *A.J. Magrath and K.G. Hardy in Business Horizons (US), Sept/Oct 87 (5 pages)*.

Discusses the difficulties that arise when a manufacturer wishes to switch his distribution channels; illustrates the point neatly by reference to Levi-Strauss, an insurance company, Porsche, Taco Bell franchises, Xerox lettering machines and IBM microcomputers. There is a further information reference for each of these cases.

Winning strategies for manufacturers in mature industries. *R.J. Mayer in The Journal of Business Strategy (US), Autumn 87 (7 1/2 pages)*.

Argues that a successful approach to manufacturing strategy contains three main elements: segmenting operations into strategic units (groups of products with similar manufacturing and marketing characteristics); exploiting manufacturing's cost structure to bridge the gap between internal costs and external market demands; and understanding competitors' cost and customer service advantages/disadvantages; adopting computer modelling techniques to predict outcomes of alternative processes to arrive at the optimum.

When the end-users' triumph leaves everyone in the dark. *M. Powell in Computer Weekly (UK), Nov 87 (1 1/2 pages)*.

Explains, clearly and simply, the dangers of departmental microcomputers using data, e.g. producing customer records which do not match with central mainframe data. Proposes four solutions, with their downsides, concluding that the only really effective answer is a database manager data dictionary, which still has the disadvantage of inflexibility.

Managing information systems professionals. *F.G. Withington in Datamation, Oct 15 87 (4 pages)*.

Identifies problem areas for managers of small information systems department – inner alibi – inability to match large company salaries, lack of promotion possibility or challenging work. Suggests that these disadvantages can be overcome by flexibility in terms of non-monetary rewards, training, and advocates strong interaction with user departments even to the extent of duty tours in production departments.

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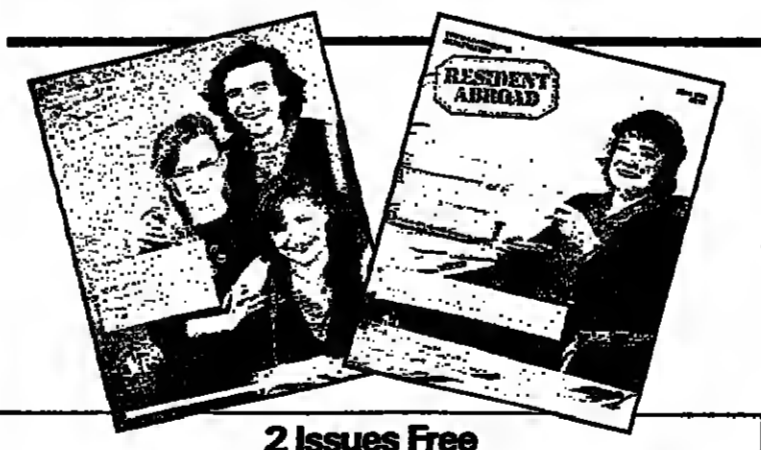
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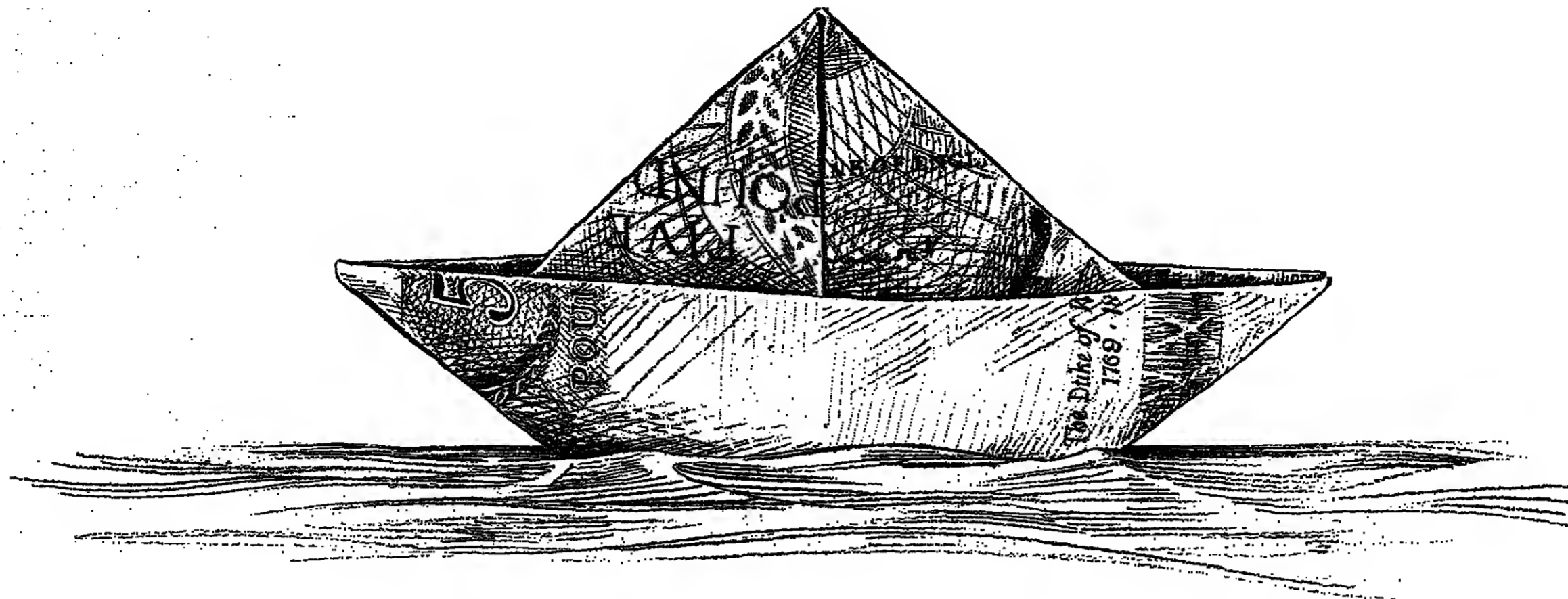
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FINANCIAL TIMES

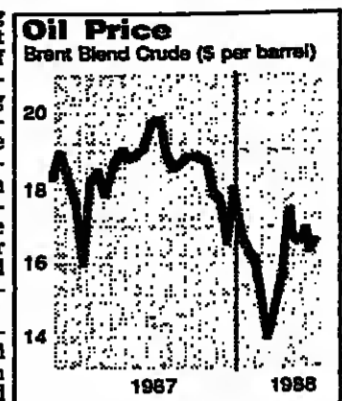
Monday June 6 1988

SHEERFRAME British Windows & Doors for the World

THE LEX COLUMN

Tying up loose ends in Vienna

Most oil analysts learnt a long time ago what a waste of time it was predicting the outcome of Opec meetings...



1981. Fortunately, lower interest rates and higher corporate earnings have prevented interest cover declining further...

News Corporation

One of biggest casualties in the recent sharp run-up in the Australian stock market has been the shares of News Corporation...

rowing ratios of US companies have risen dramatically over the last decade but on the critical question of whether increased leverage has strengthened...

While there is a certain attraction about this type of thinking, it has to be set against the recent dizzy growth of leverage in Corporate America...

US corporate leverage

The sight of Britain's Beazer winning its highly leveraged \$1.7bn takeover battle for Koppers of Pittsburgh last week...

There is nothing new about the group's high gearing levels and unorthodox accounting practices...

Janet Bush on Wall Street Electronic facelift for OTC sector

IS IT too far fetched to suggest that program trading, thoroughly on the defensive as far as the New York Stock Exchange is concerned...

All that is about to change. Since October, the National Association of Securities Dealers (NASD)...

Aces is basically a software package which will allow market makers or dealers to trade electronically in a limitless amount of stocks...

The agreements appear to be extensive and one of the market's major concerns is that companies which subscribe to the system...

Peking hosts international art auction

BY ROBERT THOMSON IN PEKING

THE OLD MONEY of Europe and the new rich of Asia outbid each other for modern art and ostentation in the Forbidden City's Hall of the Ancestors yesterday...

ulous weekend party ever devised. Who got how much money have been sensitive questions...

Great Wall of China, said yesterday that the event had been a success because \$300,000 had been raised for the Wall...

most distinguished setting in which a Sotheby's auction has ever been conducted. Mr Thompson said Chinese officials had shown "a lot of interest in the whole process of auctions"...

Tomorrow's primary will measure the change of mood in California, reports Jurek Martin

Cracks appear in the big tax break

CALIFORNIA spawns trends and movements like a frog in heat. But tonight, in Los Angeles, there will be commemorated a state initiative which can fairly be said to have materially influenced the lives of millions of Americans over the last decade...

wanting the government off its back the electorate is now more concerned that state and local authorities are being prevented from providing services commensurate with the state's growing needs...



Governor George Deukmejian: remarkable contortions

For on June 6, 1978, the voters of California passed by a two to one margin Proposition 13, the famous tax-cutting amendment which paved the way for the Reagan tax reforms of the early 1980s...

Second, in an ironic twist of fate, the government appears to have underestimated federal tax transfer payments, to the tune of about \$1bn in the current fiscal year...

needs to ride the new California whirlwind. This is because California can no longer automatically be counted in the Republican column...

Shultz gives Israel war warning

BY OUR FOREIGN STAFF IN LONDON

MR GEORGE SHULTZ, the US Secretary of State, told Israel yesterday that failure to make progress in the deadlocked Middle East peace process could bring another regional war much closer...

Shamir, the Prime Minister, out of its complacency. Mr Shultz referred specifically to the dangers of chemical warfare and the proliferation of ballistic missiles...

chairmanship of Mr Chadli Bendjedid, the Algerian President. In the occupied territories yesterday, Palestinians set tyres ablaze and flew PLO flags on the third day of a general strike...

Baker seeks to allay inflation fears

Continued from Page 1 a certain winner, and Governor Michael Dukakis is expected to triumph easily over his remaining rival for the nomination, the Rev Jesse Jackson...

tion fears were unjustified but he went further and urged the Federal Reserve, the US central bank, not to tighten monetary policy. His comments looked like a warning shot to the Fed...

Mr Karl Otto Pöhl, the West German Bundesbank President, does not see any reason for further economic stimulation in West Germany or Japan at the moment...

Bond Corp to bid for Bell Group

Continued from Page 1 of Bell Group, in particular that Bond Corporation would assume that control with at least the tacit acquiescence of the SGIC...

Continued from Page 1 He stressed: "We want to get rid of Trident. But the fact is that it does not have to be something for nothing, the fact is that it can be something for something..."

World Weather table with columns for location, temperature, and weather conditions.

Labour faces N-arms row

Continued from Page 1 The Labour leader emphasised his belief that Trident would not enhance Britain's security or significantly contribute towards its Nato responsibilities...

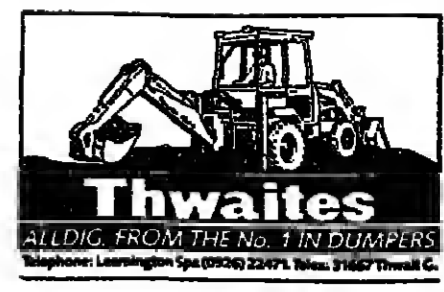
THE DISCERNING PERSON'S GUIDE TO LONDON

Advertisement for THE BARBER For a cut above the rest, we recommend Mr Beard. (Yes, honestly.) Includes a cartoon illustration of a barber and a man.



SECTION II - COMPANIES AND MARKETS FINANCIAL TIMES

Monday June 6 1988



INTERNATIONAL BONDS

AIBD papers over some of the cracks in the houses

THE Eurobond market is dead. Long live the Eurobond market! The relief was palpable at the end of the Association of International Bond Dealers (AIBD) meeting in Dallas last week...

The Trax project represents the single most important step in the Eurobond market's slow and reluctant move to co-operate with the new spirit of regulation sweeping through global markets...

Trax pilot phase later this year. Euroclear's lobbying proved powerful and it looked as if the AIBD board would be forced to call an extraordinary general meeting...

brokerage firms suspected of overreaching themselves. His intervention, coupled with a powerful speech from Mr René Jaquet, AIBD vice chairman, appeared to sway the audience...

Mr Donald Regan, former White House Chief of Staff and Treasury Secretary, in his keynote speech to the conference. However, several dealers questioned the feasibility of true liquidity in a market such as the Eurobond market...

clear. A board invitation to discuss rationalisation plans in current punched circumstances met with a stony silence from the floor. Nevertheless, more concrete concerns such as the anticipated cost of Trax, were not dealt with...

Arab investment group set to win control of Gucci

BY ALAN FRIEDMAN IN MILAN

INVESTCORP, the international investment bank founded in 1982 as a conduit for private Arab investment in Western industry, is close to taking effective control of Gucci, the luxury Italian maker of handbags, shoes, clothes and fashion accessories.

representatives on the eight-member Gucci board, has not yet revealed itself, either in public or to Mrs Maria Martelli, the chairman appointed last August by the custodians of Mr Maurizio Gucci's 50 per cent shareholding...

CREDITS

Bankers play their part in helping to thaw East-West relations

AS THE Soviet and US leaders talked last week of a new spirit of friendship between East and West, Western bankers were playing their part in helping to thaw the Cold War.

to the banks than in the country's last big financing, raised a year ago, which carried the 12% margin throughout the 10 years. In southern Europe, Portugal is thought to be close to announcing a Eurocommercial paper programme...

what above those being mooted some weeks ago. There is a 6% basis point commitment fee. In the UK, National Westminster Bank arranged a £200m multi-option facility (MOF) for Bine Circle Industries, the building materials concern...

any day of the Mickey Mouse financing that is not for the EuroDisney leisure park outside Paris. There has been fierce competition to win the mandate for the financing, of around FF1.6bn, and the suggestion last week was that Banque Nationale de Paris had emerged as the winner.

while has lined up a string of banks to provide sizeable chunks of finance, but is unlikely to make a formal syndication. Kansallis-Osake-Pankki became the first Finnish borrower with a medium-term note programme, for \$250m, arranged by Warburg Securities, with Merrill Lynch and Shearson Lehman Hutton also appointed as dealers.

Two Japanese borrowers established Eurocommercial paper programmes. Marubeni, the trading company, established a \$200m programme through Yamachi International.

Table with columns: EURMARKET TURNOVER (\$ml), Primary Market, Secondary Market, and various market data.

MORGAN GRENFELL advertisement for Unit Trusts, featuring the company name in large letters and details about four unit trusts: UK Equity Income Trust, American Growth Trust, International Growth Trust, and another unnamed one.

Advertisement for Kerr-McGee Corporation and Kerr-McGee Oil (U.K.) PLC, offering a U.S. \$200,000,000 revolving credit facility, guaranteed by Credit Suisse First Boston Limited.

INTERNATIONAL CAPITAL MARKETS

UK GILTS

No mystery over sterling's fall

THERE IS something curious in the claim made by some market commentators that sterling's dramatic slide last week proved the truth of the Chancellor's observation that the pound's rise would prove to be "unsustainable".

For the past six months, but more since March, the Government has been vigorously advocating the concept of "symmetry" in the operation of policy - that interest rates would move in an inverse relationship to the currency - allied to the policy of fighting inflation.

But whether the tightness of monetary conditions now? The current sterling index level - 763 on Friday - is consistent with base rates between 8.5 per cent and 9 per cent and if one looks at the D-Mark rate - DM3.10 - according to the doctrine of symmetry base rates should be at 8.5 per cent.

It should come as no surprise, therefore, that the money markets have already factored in 8.5 per cent rates. If past policy has any meaning then another rise in rates should be expected if the pound falls to around DM3.05 to DM3.08. This expectation may, however, be enough to hold sterling steady for a while, but equally it may not.

It has become a verity of the gilt and equity markets this year that institutional investors are not buying stock in either market and that they are amassing cash. With the exception of Japan, this seems to be a worldwide phenomenon.

This cash is going into short-term money market instruments in the world's main money centres where returns are reasonable and the investor is left with maximum flexibility. This investment is driving currencies.

There should, therefore, be no mystery surrounding sterling's fall. At around DM3.18 or higher with prevailing world interest rates, there is little in the currency left to play for, given the structure of short-term interest rates.

The interest rate differential between three-month sterling deposits had narrowed from 277 basis points to 79 against three-month dollars, from 517 basis points to 450 against the yen and from 560 points against the D-Mark to 450 over the period from March 7 to June 1.

The currency to benefit has been the dollar. But if sterling weakens further the interest rate differential could easily be re-established with the D-Mark and the yen and that might be enough to tip the balance in sterling's favour again.

Simon Holberton

US MONEY AND CREDIT

Uncertainty provides firepower for bulls and bears

IF EVER there was evidence that financial markets sometimes behave in a less than rational manner, last week provided it. After weeks in the doldrums, the equity market suddenly broke out of its lethargy and put in a fine performance for no apparent reason.

Then, just as quickly, with the bond market still looking stable, the dollar still attracting some speculative flows associated with higher short-term interest rates and more talk about inflation fears being overdone, profit taking set in.

In the bond market, prices rose strongly early in the week despite surging commodity prices, one of the factors which had sent yields soaring to nearly 9.5 per cent in recent weeks.

These are strange and confusing days for financial markets, which spend days drifting sideways before falling on apparently good news and rising on no news at all.

Part of the reason for this apparently irrational behaviour is the high level of uncertainty about what the economy is actually doing, a miserable state of affairs summed up by last Friday's release of May unemployment and jobs figures.

Apart from the confusion of the annual benchmark revisions and updates in seasonal adjustments, the release was a thoroughly mixed bag which provided firepower for the arguments of both bull and bear. On the one hand, the pace at which jobs are being added to the economy has been slowing and there was actually a rise in the overall unemployment rate last month.

On the other hand, there was evidence of strong wage rises and hours worked rose for the second month running, suggesting that the economy, or at least the industrial sector, remains very robust. Rising commodity prices are a big cloud hanging over the bond market. Last Thursday, the Commodity Research Bureau (CRB) index shot up to its highest level since December 1984, partly reflecting higher grain prices because of unusually dry weather in the mid-west which presages higher food prices.

Offsetting the potentially negative impact of the CRB index on sentiment in the bond market were speculative flows into the dollar, reflecting a more attractive interest rate differential after a further snuggling in monetary policy by the US Federal Reserve.

The inflow into the US currency was apparently strong enough to prompt the Fed to intervene by selling some dollars. As for Fed policy, last week saw something of a rethink on how aggressive the Fed's tightening has been.

The consensus after the last apparent snuggling nearly a fortnight ago was that the Fed had moved its Fed Fund target to between 7 1/2 and 7 3/4 per cent. However, funds traded below that level for most of last week, prompting many bond market economists to revise that target range down to perhaps between 7 1/4 and to 7 1/2 per cent.

The burning question in coming weeks is how easily the flow of funds into the dollar, bonds and equities could be reversed. A salutary lesson could be learned from the speed of sterling's fall from grace last week, even after base rates were raised by the Bank of England.

For months, the British authorities have tied themselves into policy knots trying to prevent sterling rising. The pound's fall last week may not be the start of a new trend but it did show how quickly market sentiment can shift. The inflows into the dollar could just as easily reverse.

An interesting theory was being bandied about in one Far East trading room last week. The suggestion was that the Fed was not nearly as frightened about inflation as people thought and that the US authorities had used the markets' inflationary production as a smokescreen for a firm-

ing in US interest rates to support the dollar. Whether or not the US authorities are manipulating the markets in this way, there is no doubt that there is some subtle stage management going on, not only in the Fed but in other central banks, to keep things under control until after the election.

There are few economic releases due to be published this week. Financial markets are likely to mark time until next week's figures, including April's trade figures, which are generally expected to show a deficit of around \$12bn compared with the surprisingly low \$9.7bn shortfall in March. Also to be released next week are figures for May retail sales, industrial production and capacity utilisation.

There is only one major economic release this week. Here it is, together with a consensus forecast by Money Market Services of Redwood City, California:

● May Producer Price Index. The consensus forecast for the PPI is for a rise of 0.4 per cent after a 0.4 per cent gain in April. A large component of the gain is expected to be food prices because of a 3.1 per cent rise in agricultural prices last month, which translates into a 1.5 per cent rise in the food component of the PPI.

This should be offset by lower energy prices, which are likely to have been deflated by the seasonal adjustment. There was also evidence of a slight fall in wholesale petrol prices last month.

Janet Bush

Only three top US banks met capital goal

ONLY THREE of the top 11 banks in the US would have been able, at the end of last year, to meet the new international capital requirements being proposed by the Basel-based Bank for International Settlements, according to IBCA, the London-based credit rating agency.

In a report assessing the impact of the proposals, IBCA also points out that banks outside the top 11 are much stronger, and a greater proportion of them would have sufficient capital. But altogether 14 leading banks will need to raise a total of \$10bn to meet the new capital levels which come into force at the end of 1992, it says.

The three top banks which exceeded the minimum capital requirement based on their 1987 results are J.P. Morgan, Bankers Trust and First Interstate. IBCA rates the remaining banks according to the number of years worth of retained earnings they need to reach the Basle level.

The calculation is based on 1986 earnings because of the distortive effect of last year's Third World debt crisis. Wells Fargo (8.3), Citicorp (2), Chase Manhattan (3.1), First Chicago (3.9), Chemical (4.3), Manufacturers Hanover (5.6), BankAmerica (no figure because it incurred a loss in 1986).

IBC identifies three banks which may not be able to reach the Basle level through retained earnings by 1992: BankAmerica, Manufacturers Hanover and Continental Illinois.

The Basle proposals will require banks to have a ratio of capital to risk assets of at least 8 per cent. At least half of this must consist of "tier 1 capital", which comprises mainly equity. In a recent report on Japanese banks, IBCA said these would need \$50bn of additional capital to comply with the levels proposed by the BIS.

David Lascelles

US MONEY MARKET RATES (%)

Table with 5 columns: Instrument, Last Friday, 1 week, 4 wks, 12-month High, 12-month Low. Includes Fed Funds (weekly average), 91-day Treasury bills, etc.

US BOND PRICES AND YIELDS (%)

Table with 5 columns: Instrument, Last, Change on yield, 1 week, 4 wks. Includes 3-year Treasury, 5-year Treasury, etc.

NRI TOKYO BOND INDEX

Table with 5 columns: Instrument, Average, Last, 12 wks, 26 wks. Includes Government Bonds, Corporate Bonds, etc.

FT/AIBD INTERNATIONAL BOND SERVICE

Large table listing international bonds with columns for Issuer, Instrument, Maturity, Yield, Price, etc. Includes entries for AETNA LIFE, ALFA LOM, ALFA LOM, etc.

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Advertisement for 'financial' featuring a globe and the word 'financial' in large letters. Text describes the program's content and availability.

Users of Financial's information and training programmes include: AP Dow Jones, Angon International, Asian Development Bank, Australia & New Zealand Banking Group, Autophon Switzerland, etc.

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24th March, 1988

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| Shearson Lehman Brothers International | SBCI Swiss Bank Corporation Investment banking |

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New issue

12th April, 1988

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European Investment Bank

7½ per cent. Bonds due 1996

Issue Price 101¾ per cent.

Union Bank of Switzerland (Securities) Limited

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Aktiengesellschaft |
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New issue

5th May, 1988

U.S.\$100,000,000



THE TORONTO-DOMINION BANK

(a Canadian chartered bank)

8 per cent. Deposit Notes due July 5, 1990

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Union Bank of Switzerland (Securities) Limited

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New issue

28th April, 1988

Can. \$300,000,000



BCE Inc.

9½% Series 4 Notes, Due 1993

Issue Price 101¾%

Union Bank of Switzerland (Securities) Limited

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Sound Diffusion restructure and reorganisation

By Philip Coggan

Sound Diffusion, electrical equipment leasing group, will today announce a comprehensive restructuring and reorganisation package, following a complete review of the group's operations by the new management.

WCRS expands via Taiwan deal

By Fiona Thompson

WCRS, the advertising agency, has extended its Pacific Basin operations through an acquisition in Taiwan. It has purchased an initial 40 per cent interest in Intelligent Advertising Agency and plans to acquire a further 40 per cent in five tranches of 8 per cent each.

Australian fund lifts water company stake

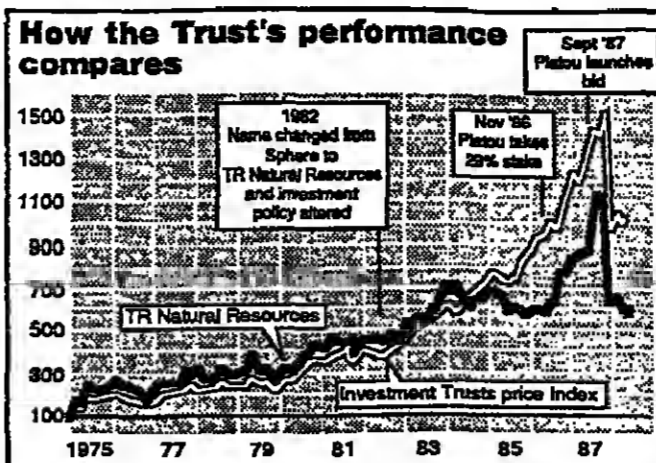
Associated Insurance Pension Fund has increased its stake in Mid-Sussex Water Company from 18.7 to 17.2 per cent of the voting capital.

FT Share Service

The following securities were added to the Share Information Service in Saturday's edition:

Nikki Tait on the controversy surrounding the proposals by TR Natural Resources Minority squeezed into unenviable position

Upheavals in the investment trust sector are scarcely news these days and changes afoot at TR Natural Resources, an £88m fund and still nominally part of the Touche Renmant stable, might normally pass with little comment.



Quite why TRNR ever wanted this wider investment freedom in the first place is something of a mystery. 'You may well ask what the point of the change was,' says Mr Pease, adding firmly that no specific investments had been lined up.

Amongst a heap of proposals for the trust - including new management, new name, new investment policy, and a scrip issue of warrants - is a suggestion that the managers should be able to take a few chunkier investments if they so wish.

Perkins buys shellfish supplier

Perkins, a USM-quoted food company, has bought the Sefton Meadow Group, a shellfish supplier, for a maximum of £2.08m.

COMPANY NEWS IN BRIEF

BARBICAN HOLDINGS, the industrial property and services company that was recently quoted under rule 535 (2), has joined the Third Market. The introduction was sponsored by CGS Securities.

BOARD MEETINGS

The following companies have notified dates of board meetings to the Stock Exchange. Such meetings are usually held for the purpose of considering dividends. Official notices are not issued unless the dividends are in arrears or the board has decided to vary the dividend.

Rockwood acquisition

Rockwood Holdings, the USM-quoted group with interests in distribution services, electronic components and security consultancy, has acquired the Walford Meadows Group of companies, a wood's international distribution leading international freight forwarder for an initial £5m.

Advertisement for First Leisure Corporation PLC, featuring a logo and text: '£50,000,000 Sterling Commercial Paper Programme Arranged by Hill Samuel & Co. Limited'.

Advertisement for ALUMINIUM, 'The Financial Times proposes to publish this survey on 26th October 1988'.

Advertisement for NORTHAMPTONSHIRE, 'The Financial Times proposes to publish this survey on 22nd June 1988'.

SWEDEN

The Financial Times proposes to publish this survey on: June 16th

For a full editorial synopsis and advertisement details, please contact: Chris Scheuing on 01-248 8000 ext 3699

Advertisement for U.S. \$100,000,000 The Export-Import Bank of Korea Floating Rate Notes due 1995

Advertisement for TOPS SERIES III LIMITED U.S. \$110,000,000 Series III Floating Rate Trust Obligation Participation Securities due 1992

Advertisement for Notice of Early Redemption U.S. \$300,000,000 Ireland Floating Rate Notes due 1994

Advertisement for VICTORIA HALL COMPANY, LIMITED U.S. \$110,000,000 GUARANTEED FLOATING RATE NOTES DUE 1992

Advertisement for Crown Communications Group PLC (formerly Crown Television Productions PLC) featuring a logo and text: 'Introduction to the Unlisted Securities Market'.

Clearly, the sequence of events has been quite legitimate, and the change in investment policy may well be welcome. That said, minority shareholders have undoubtedly been squeezed into an unenviable position.

PENDING DIVIDENDS table with columns: Date, Announcement year, Date, Announcement year. Lists various companies and their dividend details.

Advertisement for GRANVILLE SPONSORED SECURITIES, listing various securities with columns: Capitalization, Company, Price, Change on week, Div. yield, % P/E.

Advertisement for BankAmerica Corporation U.S. \$400,000,000 Floating Rate Subordinated Capital Notes Due 1997

Advertisement for Provinsbanken A/S U.S. \$60,000,000 Floating Rate Capital Notes 2000

FINANCIAL TIMES STOCK INDICES table with columns: Index, June 3, June 6, June 13, June 20, June 27, June 29, High, Low, Stock Compilation High.

FT UNIT TRUST INFORMATION SERVICE

AUTHORISED UNIT TRUSTS

Table listing various unit trusts such as Abbey Unit Trust, Abbey Income, Abbey Growth, etc., with columns for name, manager, and other details.

Table listing unit trusts including Anthony White Unit Trust, Arkwright Management, Asst Unit Trust, etc.

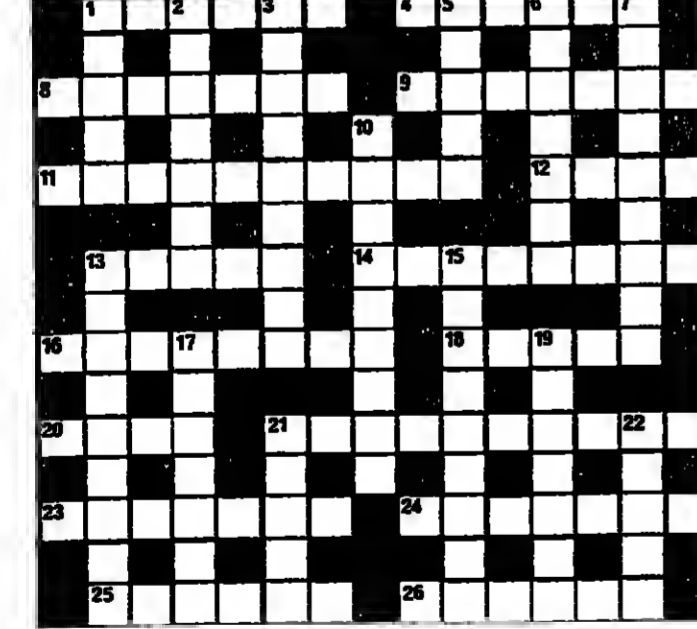
Table listing unit trusts including Bannockburn Management Co Ltd, Baulite Clifford & Co Ltd, Baxendale Unit Trust, etc.

Table listing unit trusts including Baxendale Unit Trust, Baxendale Income, Baxendale Growth, etc.

I.G. INDEX LTD, 9-11 GROSVENOR GARDENS, LONDON SW1W 0BD. Tel: 01-828 7233/5699. Reuters Code: IGIN, IGIO.

Table with columns for FT 30, FTSE 100, and WALL STREET, showing index values and dates.

FT CROSSWORD No.6,648 SET BY TANTALUS



- CROSSWORD CLUES: 1 and 4 Starting Dickens, nobody means to mistake his work (6,3,3). 2 Exercise W. African baboon (5). 3 New man takes in a fellow with status (7). 4 Once business accepts it, hand over to foreign power (9). 5 Do any London stores keep this material? (5). 6 Help a parasite some might say (7). 7 Seeing Greek character with sea-grd. I go in for food (9). 8 "Whiles, like a puffed and reckless" - (Hamlet) (9). 9 Manager may be on public transport (9). 10 Possibly dread pose by ruffian (9). 11 In October, girl to behave in an exaggerated way (7). 12 Protection for some footballers (7). 13 Trick sure to irritate a (4). 14 Newcomer needing a chiropodist? (10). 15 Unfamiliar way to mountain (7). 16 Deal profits, yes? (7). 17 Somewhat early to begin (8). 18 Company at this place stick together (6).

Table listing unit trusts including Bell Court Fund, Bell Court Income, Bell Court Growth, etc.

Table listing unit trusts including Bell Court Fund, Bell Court Income, Bell Court Growth, etc.

Table listing unit trusts including Bell Court Fund, Bell Court Income, Bell Court Growth, etc.

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FT UNIT TRUST INFORMATION SERVICE

Company Name	Address	Phone	Investment Focus	Current Value	Change	
British National Financial Services	15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000					

OTHER UK UNIT TRUSTS

INSURANCES

FT UNIT TRUST INFORMATION SERVICE

Main table containing unit trust information, organized into columns for various fund categories such as Property, Life, and Overseas. Each entry includes fund names, providers, and numerical values.

OFFSHORE INSURANCES

Table listing offshore insurance companies and their respective products, including details on policy types and terms.

OFFSHORE AND OVERSEAS

Table listing offshore and overseas investment services, including fund names, providers, and performance metrics.

MANAGEMENT SERVICES

Table listing management services providers and their contact information.

UK LISTED

Table listing UK-listed companies and their financial data.

UK LISTED

Table listing UK-listed companies and their financial data.

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FT UNIT TRUST INFORMATION SERVICE

Table of FT Unit Trust Information Service listing various unit trusts, their managers, and performance metrics.

LONDON SHARE SERVICE

Table of London Share Service listing various share funds, their managers, and performance metrics.

LONDON SHARE SERVICE

AMERICANS - Contd. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like IBM, Microsoft, and Intel.

CANADIANS. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like Alcan, Inco, and Northern Telecom.

BANKS, HP & LEASING. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like Citicorp, Citicorp Ind, and Citicorp Fin.

BEERS, WINES & SPIRITS. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like Heineken, Carlsberg, and Heidsieck.

BUILDING, TIMBER, ROADS. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like Bovis Lend Lease, Bovis Lend Lease, and Bovis Lend Lease.

BUILDING, TIMBER, ROADS - Contd. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like Bovis Lend Lease, Bovis Lend Lease, and Bovis Lend Lease.

CHEMICALS, PLASTICS. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like ICI, ICI, and ICI.

DRAPERY AND STORES. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like Debenhams, Debenhams, and Debenhams.

BUILDING, TIMBER, ROADS. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like Bovis Lend Lease, Bovis Lend Lease, and Bovis Lend Lease.

DRAPERY AND STORES - Contd. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like Debenhams, Debenhams, and Debenhams.

ELECTRICALS. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like British Telecom, British Telecom, and British Telecom.

DRAPERY AND STORES. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like Debenhams, Debenhams, and Debenhams.

DRAPERY AND STORES. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like Debenhams, Debenhams, and Debenhams.

ENGINEERING. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like BAE Systems, BAE Systems, and BAE Systems.

ENGINEERING - Contd. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like BAE Systems, BAE Systems, and BAE Systems.

ENGINEERING - Contd. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like BAE Systems, BAE Systems, and BAE Systems.

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ENGINEERING. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like BAE Systems, BAE Systems, and BAE Systems.

INDUSTRIALS (Misc.) - Contd. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like British Airways, British Airways, and British Airways.

INDUSTRIALS (Misc.) - Contd. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like British Airways, British Airways, and British Airways.

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INSURANCE. Table with columns for Stock, Price, Bid, Ask, and Volume. Includes companies like British Airways, British Airways, and British Airways.

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LONDON SHARE SERVICE

LEISURE - Contd

Table of Leisure stocks including Leisure Group, Leisure Leisure, Leisure Leisure, etc.

PAPER, PRINTING, ADVERTISING - Contd

Table of Paper, Printing, Advertising stocks including Newsprint, Newsprint, Newsprint, etc.

TEXTILES - Contd

Table of Textiles stocks including Textiles, Textiles, Textiles, etc.

TRUSTS, FINANCE, LAND - Contd

Table of Trusts, Finance, Land stocks including Trusts, Finance, Land, etc.

OIL AND GAS - Contd

Table of Oil and Gas stocks including Oil and Gas, Oil and Gas, Oil and Gas, etc.

MINES - Contd

Table of Mines stocks including Mines, Mines, Mines, etc.

MOTORS, AIRCRAFT TRADES

Table of Motors, Aircraft Trades stocks including Motors, Aircraft Trades, Motors, Aircraft Trades, etc.

PROPERTY

Table of Property stocks including Property, Property, Property, etc.

TOBACCOS

Table of Tobaccos stocks including Tobaccos, Tobaccos, Tobaccos, etc.

TRUSTS, FINANCE, LAND

Table of Trusts, Finance, Land stocks including Trusts, Finance, Land, etc.

OVERSEAS TRADERS

Table of Overseas Traders stocks including Overseas Traders, Overseas Traders, Overseas Traders, etc.

MISCELLANEOUS

Table of Miscellaneous stocks including Miscellaneous, Miscellaneous, Miscellaneous, etc.

Commercial Vehicles

Table of Commercial Vehicles stocks including Commercial Vehicles, Commercial Vehicles, Commercial Vehicles, etc.

PROPERTY

Table of Property stocks including Property, Property, Property, etc.

TOBACCOS

Table of Tobaccos stocks including Tobaccos, Tobaccos, Tobaccos, etc.

TRUSTS, FINANCE, LAND

Table of Trusts, Finance, Land stocks including Trusts, Finance, Land, etc.

OVERSEAS TRADERS

Table of Overseas Traders stocks including Overseas Traders, Overseas Traders, Overseas Traders, etc.

MISCELLANEOUS

Table of Miscellaneous stocks including Miscellaneous, Miscellaneous, Miscellaneous, etc.

Garages and Distributors

Table of Garages and Distributors stocks including Garages and Distributors, Garages and Distributors, Garages and Distributors, etc.

PROPERTY

Table of Property stocks including Property, Property, Property, etc.

TOBACCOS

Table of Tobaccos stocks including Tobaccos, Tobaccos, Tobaccos, etc.

TRUSTS, FINANCE, LAND

Table of Trusts, Finance, Land stocks including Trusts, Finance, Land, etc.

OVERSEAS TRADERS

Table of Overseas Traders stocks including Overseas Traders, Overseas Traders, Overseas Traders, etc.

MISCELLANEOUS

Table of Miscellaneous stocks including Miscellaneous, Miscellaneous, Miscellaneous, etc.

NEWSPAPERS, PUBLISHERS

Table of Newspapers, Publishers stocks including Newspapers, Publishers, Newspapers, Publishers, etc.

PAPER, PRINTING, ADVERTISING

Table of Paper, Printing, Advertising stocks including Paper, Printing, Advertising, Paper, Printing, Advertising, etc.

PROPERTY

Table of Property stocks including Property, Property, Property, etc.

TRUSTS, FINANCE, LAND

Table of Trusts, Finance, Land stocks including Trusts, Finance, Land, etc.

OVERSEAS TRADERS

Table of Overseas Traders stocks including Overseas Traders, Overseas Traders, Overseas Traders, etc.

MISCELLANEOUS

Table of Miscellaneous stocks including Miscellaneous, Miscellaneous, Miscellaneous, etc.

PAPER, PRINTING, ADVERTISING

Table of Paper, Printing, Advertising stocks including Paper, Printing, Advertising, Paper, Printing, Advertising, etc.

PROPERTY

Table of Property stocks including Property, Property, Property, etc.

TOBACCOS

Table of Tobaccos stocks including Tobaccos, Tobaccos, Tobaccos, etc.

TRUSTS, FINANCE, LAND

Table of Trusts, Finance, Land stocks including Trusts, Finance, Land, etc.

OVERSEAS TRADERS

Table of Overseas Traders stocks including Overseas Traders, Overseas Traders, Overseas Traders, etc.

MISCELLANEOUS

Table of Miscellaneous stocks including Miscellaneous, Miscellaneous, Miscellaneous, etc.

SHIPPING

Table of Shipping stocks including Shipping, Shipping, Shipping, etc.

PROPERTY

Table of Property stocks including Property, Property, Property, etc.

TOBACCOS

Table of Tobaccos stocks including Tobaccos, Tobaccos, Tobaccos, etc.

TRUSTS, FINANCE, LAND

Table of Trusts, Finance, Land stocks including Trusts, Finance, Land, etc.

OVERSEAS TRADERS

Table of Overseas Traders stocks including Overseas Traders, Overseas Traders, Overseas Traders, etc.

MISCELLANEOUS

Table of Miscellaneous stocks including Miscellaneous, Miscellaneous, Miscellaneous, etc.

SHOES AND LEATHER

Table of Shoes and Leather stocks including Shoes and Leather, Shoes and Leather, Shoes and Leather, etc.

PROPERTY

Table of Property stocks including Property, Property, Property, etc.

TOBACCOS

Table of Tobaccos stocks including Tobaccos, Tobaccos, Tobaccos, etc.

TRUSTS, FINANCE, LAND

Table of Trusts, Finance, Land stocks including Trusts, Finance, Land, etc.

OVERSEAS TRADERS

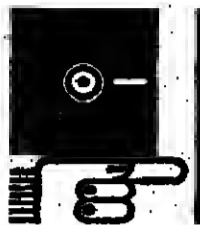
Table of Overseas Traders stocks including Overseas Traders, Overseas Traders, Overseas Traders, etc.

MISCELLANEOUS

Table of Miscellaneous stocks including Miscellaneous, Miscellaneous, Miscellaneous, etc.

Stock Exchange dealing classifications are indicated in the right of each stock name. A 'D' denotes a dividend in pence and 'S' denotes a dividend in shillings. Dividends are based on the latest available information. Dividends are shown in pence and shillings. Dividends are shown in pence and shillings. Dividends are shown in pence and shillings.

FINANCIAL TIMES SURVEY



The issue of open systems has profound implications for computer users and suppliers alike.

Suddenly, strategic alliances are being forged between traditional competitors and the structure of the industry looks set for irrevocable change, says Alan Cane.

Potent force for progress

COMPUTING STANDARDS, to paraphrase Mr Kenneth Olsen, president of Digital Equipment Corporation (DEC), are about as exciting as a Russian truck. Indeed, many of those who have laboured over the past three decades on the thousands of documents involved in standards specification may wonder what Mr Olsen has against Soviet vehicles.

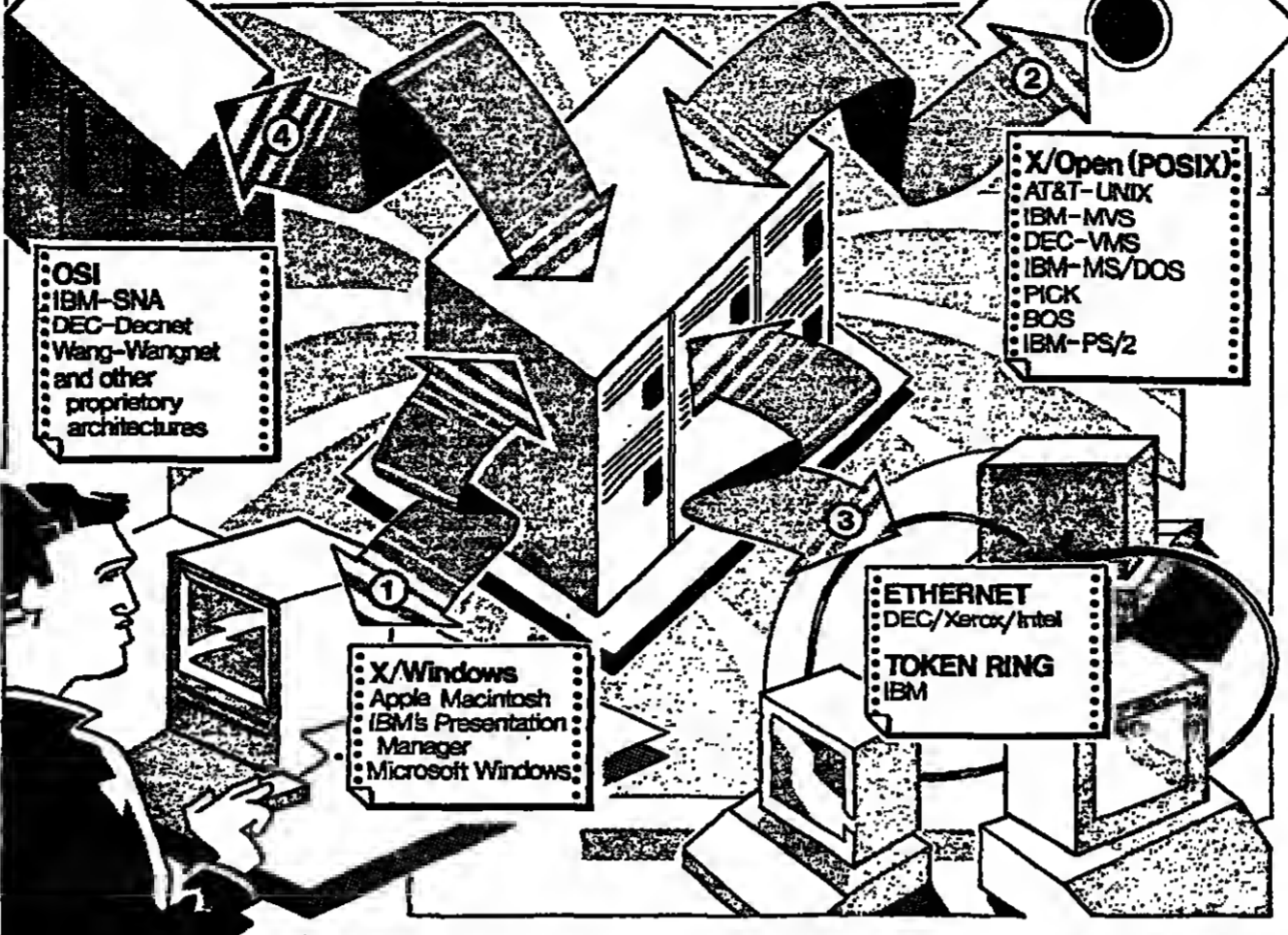
But if standards are not exciting, they have nevertheless a power to change the pattern of competition within an industry and to lower the barriers to entry which makes them profoundly important.

That is why standards, and especially open standards, have become the hottest issue in the computer industry and beyond. Bankers, retailers and manufacturers are discussing standards with an intensity and concentration usually reserved for commercial strategy and tactics.

They are the driving force behind a rash of new, sometimes bizarre, business alliances. Who would have predicted a year ago, for example, that the chief executives of deadly competitors like International Business Machines and Digital Equipment Corpora-

How standards help business through computer communication

Tomorrow's computers will have to communicate with: 1 people, 2 software from a range of suppliers, 3 terminals and personal computers, 4 systems from other manufacturers



□ In each standards' area, the emerging and preferred standards are shown in bold type; other contenders appear in lighter type.

Open systems

ment of the Tower Of Babel. Many customers are well aware, furthermore, that no one supplier can meet all of their hardware and software requirements. They want, therefore, to be able to mix-and-match equipment in corporation-wide networks.

But equally they are attracted by the idea of one-stop shopping for their information systems, which is why the fastest growing form of computing services company these days is the "systems integrator," with the special skills needed to be able to take equipment from a variety of suppliers and tie it into a single, networked system.

Open standards, obeyed by the majority of hardware and software suppliers, are seen as the key to simplifying systems integration.

In principle, computer industry standards are very simple; only the detail is complex. And that complexity is not helped by a tendency, almost a compulsion, on the part of those individuals and organisations involved in standards to cloak their activities in codes and acronyms - TC97, SC2, JTCL, X.24, LU6.3 and so on - more suited to secret societies than to business organisations.

At their simplest, computing standards deal with the four directions in which data process-

CONTENTS

The setting of a standard: the realisation of the dream of 'computer glasnost'. Testing compliance and certification: not an easy task. 2

The adoption of standards by top companies in Europe: new evidence of commitment. The impact of public and private standards groups: an unstoppable momentum in under way. The IBM standard in the woodpile: two major strategies. European Pavillion at the Enterprise Networking Event (ENE '88): PERA personalities at Baltimore. 4

MAP and TOP - the manufacturing automation protocol and the technical and office protocol: a make or break week in Baltimore? 5

Why is this important? There are seven 'layers' or functional divisions within OSI defining everything from the shape of the connecting pins to the way a section of text is handled in passing from one system to another. Thousands of rules are involved, and each has to be obeyed precisely if communication is to be successful.

Furthermore, many of the rules can easily be interpreted in different ways. If, therefore, communications between two machines using an OSI link fails, it can be difficult, if not, impossible to apportion blame for the failure. Confidence testing is therefore the only guarantee a customer has that a system labelled "OSI" will, in fact, behave according to the rules.

OSI rules are being developed by a joint technical committee of the International Standards Organisation and the International Electrotechnical Commission and are virtually complete.

Evidence of the progress made is the Enterprise Networking Event '88 International (ENE) which opens today in Baltimore, IS - a demonstration that open systems are ready to be used in the real world. Basically a manufacturing operation, ENE will demonstrate two important derivatives of OSI-MAP (Manufacturing Automation Protocol) and TOP (Technical and Office Protocol).

MAP and TOP emerged as the result of initiatives on the part of General Motors and Boeing Corporation, respectively - groups which have been demanding that their computing suppliers obey open systems rules if they expect to win contracts with them.

The UK is participating in ENE through sponsorship by the Department of Trade and Industry and co-ordination by the Production Engineering Research Association (PERA).

Its contribution, a "jobbing shop," involves six small and medium-sized companies in the computer integrated manufacturing (CIM) field - CS Consultants, CS Developments, Cimtel, Kewill, Ferranti International, Reflex and Sydney Communications.

According to Mr Malcolm Millington, Pera's CIM manager, ENE is important for three reasons.

□ It brings together as sponsors customers - as the 1,500

strong MAP/TOP user group - and vendors - the Corporation for Open Systems.

□ The sheer scale of the exhibition: nine separate booths bringing together equipment from 56 separate vendors, is on a size never seen before.

□ All the vendors will be showing products based on a new version of MAP, MAP Version 3, that will not be tampered with for six years, giving customers a guarantee of continuity and protecting their investment in MAP-based systems.

Mr Millington says: "MAP V3 has been the target for every body. It promises the customer an intelligent network that will look after itself."

The emergence of OSI as a settled standard means also that the OSI/SNA debate is, for all practical purposes, over. IBM will stick with SNA but communicate with other systems through OSI gateways - high speed translation devices. Technology has caught up with the politics.

The hottest area of the standards debate, however, concerns operating systems, the software computers used to regulate their internal workings and more significantly - to interact with software applications programs.

For reasons more to do with history than technology, the favoured system is called Unix, developed over a decade ago AT&T, the US telecommunications giant. AT&T licenses the design principles of this system to other users, many of whom have developed their own versions - Digital Equipment's Ultrix, Microsoft's Xenix and so on.

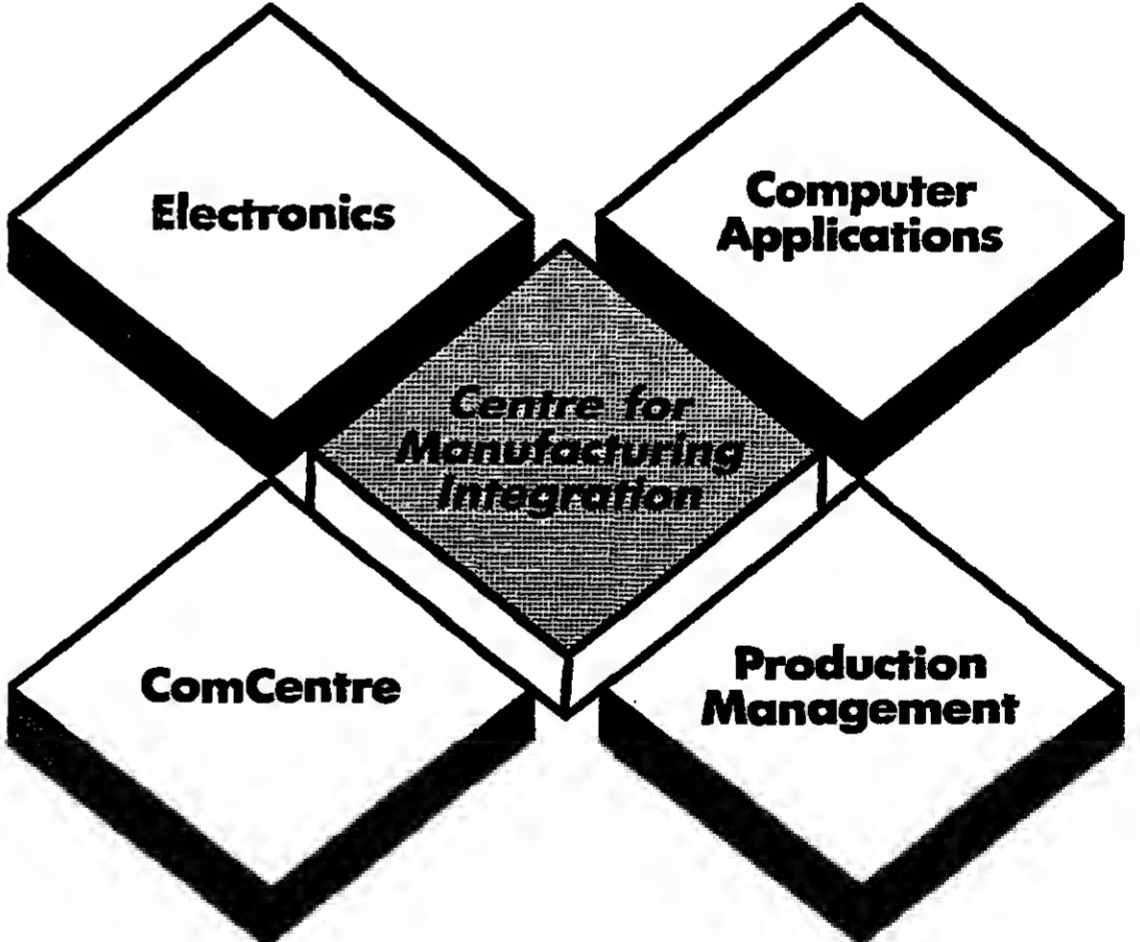
The whole computing world - customers, hardware suppliers and software suppliers alike - would be best served by agreement to a single, common version of Unix. This is the aim, of the X/Open group, a consortium of users and suppliers (but excluding IBM). It wants to establish a "common applications environment" called Posix which would ensure that all computers look alike to applications software.

Earlier this year, AT&T upset the computing world by agreeing to work with Sun Microsystems, an aggressive workstation vendor, to develop a definitive Unix. IBM, DEC, Hewlett Packard

Continued on page 3

PERA TOTAL CIM CAPABILITY

- PERA offers impartial, practical advice on all technical and commercial aspects of Computer Integrated Manufacturing
- PERA AWARENESS - in the form of ComCentre, the UK Centre for communications standards which gathers and disseminates information to industry on worldwide communications standards
- PERA CONSULTANCY - in Production Management (MRP, JIT, OPT), Computer Applications, Electronics and Systems Design
- PERA THE CENTRE FOR MANUFACTURING INTEGRATION



Offers YOUR company the benefit of our expertise in a whole range of advanced manufacturing techniques:

- Networking and Systems Integration to ensure that manufacturing and office equipment is truly interoperable
- Vision and other measurement techniques as part of your manufacturing and quality control systems
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OPEN SYSTEMS 2

The setting of a standard

Aiming for a 'computer glasnost'

MORE THAN in any other industry, manufacturers of computer systems have resisted standardisation.

Since its very beginnings, the computer industry has been an umbrella name for a whole set of sub-industries with separate, exclusive cultures and different priorities. The only thing the various suppliers have in common is that they all sell computer systems to "solve problems."

Each sub-industry offers a set of components, which are internally consistent, but seldom compatible with those offered by other branches of the computer industry. This has created a situation where users of computers are divided and unable to put sufficient pressure on their suppliers to conform to industry-wide standards.

Hardware suppliers have exploited this situation by making their systems 'proprietary', that is, unlike anyone else's system.

As long ago as the 1960s, it was recognised that industry-wide standards, rather than constraining the industry, would aid expansion. If users could exercise choice over hardware and software purchases, without fear of being 'locked' in to proprietary computer systems, then they could concentrate their efforts on building their applications.

The first attempt to achieve this focused on programming languages and the Cobol language in particular. Cobol became an international standard in the 1960s and most manufacturers adopted it (mainly because the US Government, which was



John L. Doyle, head of the Open Software Foundation. He is on secondment from Hewlett-Packard, where he is executive vice president, systems technology sector.

at this time the world's largest computer-user, decreed Cobol was mandatory for government contracts).

But although Cobol was 'standardised', each manufacturer was allowed to enhance the language in its own way and the result was that a Cobol program written for one computer could not be run on another without changes. Computer users were still 'locked' in to proprietary systems.

Through the 1970s, the gradual evolution of networks of computer systems, made the problem of industry standards even more pressing. While computers operated in isolation, the only reason for building systems around universally-accepted standards was to allow users to move to other computer hardware - a factor which unsurprisingly met with little enthusiasm from hardware manufacturers.

But when networks came along

during the 1970s, hardware manufacturers had an incentive to conform to a 'connection' standard. It gave them a chance to sell their wares to customers who had traditionally bought everything from another supplier.

Some of these 'connection' standards evolved as *de facto* industry standards as a result of the market dominance of a particular manufacturer - usually IBM. The 2740 and 3370 terminal standards, which were devised by IBM for its proprietary products, gained such a critical mass of acceptance in the industry, that they were universally adopted by all manufacturers.

By the beginning of the 1980s, networks had proliferated at such a rate that a formal standard, which could cover every aspect of network 'connectivity' from the physical technology used to connect hardware, through to the way applications behaved in the network, became a necessity.

The International Standards Organisation (ISO), in consultation with computer manufacturers and telecommunications companies, introduced a framework for future development of network systems. It was called the ISO Open Systems Interconnection (OSI) model and comprised seven distinct 'layers' or levels of connection.

The layers allowed for 'connectivity' both to layers above and below and to equivalent layers in other models. The lowest level, physical connection, for example, defined the way that devices are connected to each other and the interface to the next level up - the Data Link layer.

The data link layer definition specifies connections to other data link layers and the interfaces to the physical layer below and the network layer above it, and so on.

The seven-layer model is, of necessity, vague in terms of the detailed specification of how each layer works. It is up to the individual manufacturer how the model is implemented as long as the appropriate interface standards are adhered to.

In principle, the model has been accepted by the whole industry and, in the long term, it will lead to a realisation of the dream of completely open systems - a sort of computer 'glasnost'.

The problem is that some manufacturer's networking plans were well advanced when the ISO OSI standard was first drafted. IBM, for example, announced its System Network Architecture (SNA) - its model for computer networking - in the mid-1970s.

SNA was effectively superseded last year with the introduction of Systems Application Architecture (SAA), which extends and embraces SNA.

But ISO OSI, SNA and DEC NET (not to mention all the other manufacturers' interpretations of OSI) are different and can only co-exist to a point. IBM's resilience in backing OSI without reservation, remains the main obstacle to its universal acceptance.

Despite this, IBM's actions over the last two or three years have led some commentators to say that IBM's future will increasingly move toward open systems. At the annual UK Computer Mea-



Boost for business effectiveness: the Abbey National Building Society is working in partnership with Olivetti in the UK to use open system technology to increase its business efficiency.

Abbey National has placed an £18m order with Olivetti for the supply of new branch and administration office systems, based on the Olivetti PB (Personal Business) environment which provides a range of spe-

cialised software and hardware products. The order is for 3,900 PC systems with 750 LSX minicomputers for use throughout Abbey National's network of more than 200 branches.

Compliance and certification

Not an easy task

measurement Group meeting last month, Stelios Zographos, a consultant with BIS Applied Systems, suggested that IBM is more serious about OSI because its large customers have come to realise its importance for the development of their corporate networks.

IBM's leading role in the creation last month of the Open Software Foundation, another important aspect of open systems, suggests that it will continue to increase its 'commitment'.

Philip Manchester

COMPUTING standards are of very limited use without independent tests to prove that products conform to the rules.

The history of conformance testing (see details below) really started in the early 1960s, when the National Bureau of Standards in the US developed primitive tools to test one of the seven layers of the Open Systems Interconnection (OSI) international standard.

In 1982, the UK Department of Trade and Industry commissioned the National Computing Centre (NCC) to study the feasibility of providing independent

The non-invasive method works adequately because the OSI rules are intended only to ensure that information and instructions are not garbled when products from different manufacturers are linked in one network. They are not concerned with the inner workings of the computer.

Non-invasive testing involves treating the product as a black box and linking its interfaces to the test computer (which is usually a Sun workstation). The latter hurries data at it and monitors the speed and accuracy of its responses.

The costs of testing vary greatly according to the complexity of the OSI rules being applied. Companies can either pay to use a testing centre's facilities for a certain period or buy a test system for use in-house.

As an example, the NCC charges £10,000 for a year's subscription to test a single OSI layer. The price of an NCC test system for use in-house runs from £20,000 to £37,500.

Tests are now commercially available or under development for most OSI standards, though there are still some significant gaps in the range. But the most urgent need now is for an internationally accepted certification scheme, so that buyers will know which products have passed the conformance tests that are important for their particular network.

At present there are no formal certification procedures. After a product has been through a conformance test, the supplier receives a technical report giving details of the tests performed and the results achieved, but no certificate is issued to show that the product conforms to OSI standards.

In the long run it is clearly unrealistic to expect anyone buying a product to plough through a detailed test report and conclude from that whether it follows the OSI rules. So the testing organisations are searching for a simple system, similar perhaps to the 'kite mark' used by the British Standards Institute or the green circle of British Telecom, to show clearly and unambiguously that the product has passed the appropriate OSI tests.

Most work on certification has been done by the Consortium for Open Systems in the US. COS investigated the idea of using a green or gold dot to show that products could interconnect or that they had been performance tested to a certain standard. But such admirable simplicity did not suit the complexities of OSI with its various 'stacks' and 'layers'. Even so, COS hopes to introduce an effective certification procedure before the end of 1988.

At the same time, the European Community is actively promoting the European Certification of Information Technology (ECIT) scheme. This is designed to provide common criteria for accrediting testing laboratories and certifying products, and to allow each country to recognise the results of tests performed elsewhere.

Japan is also preparing to introduce a certification scheme, and eventually an international agreement is likely to emerge, dividing the world into three 'spheres of influence' - European, American and Japanese - each with its own certifying authority.

Clive Coolson

In business, you don't get far without connections.



April 8th, 1869 should have been a great day in American railroad history. The eastbound Central Pacific line was due to join up with the westbound Union Pacific.

It didn't. They missed. And the two companies continued in stubborn, parallel absurdity until the President intervened and broke the deadlock.

The moral holds true today. In

business, connections are everything.

Our commitment to open systems and industry standards - such as MAP/

TOP compliance - means different departments in your organisation can share their know-how. Rather than making tracks in splendid isolation.

And, should you ever need to change direction, our UNIX* based systems allow

you to link easily with other vendors'

equipment.

Make the NCR connection today, on 01-724 4050. Railroaded, you won't be. Impressed, you will be.



Creating value

OPEN SYSTEMS 3

The 'MAP' and 'TOP' protocols

A make or break week

THIS WEEK could make or break the MAP and TOP communications protocols. MAP, devised by General Motors of the US, is the manufacturing automation protocol and TOP, its office equivalent, is the technical and office protocol championed by Boeing.

Boeing, GM and over 40 vendors gathered at the Enterprise Network Event (ENE) in Baltimore this week to demonstrate the first available MAP and TOP systems to conform, at least in theory, to open systems interconnect (OSI) international standards.

All of them, but especially the long-suffering vendors, share one hope that the businessmen who go to ENE are so impressed by the demonstration that they decide to install MAP and TOP, instead of just talking about them.

MAP and TOP have been demonstrated before. The first demonstration was in Las Vegas in July, 1984. The next was in Detroit in November 1985. ENE is the final event in the series.

There was also one European demonstration, "Cinap" in Birmingham, in December 1986, though Cinap, organised by Britain's Department of Trade and Industry, was not part of the official demonstration series.

ENE is different because the versions of MAP and TOP seen at the earlier shows did not fully conform to OSI. How could they? Many of the necessary OSI standards were not fully defined. GM and its vendors filled the holes with 'show code' and other compromise patchwork.

This was not ideal - but at least business people would see what vendor independent communications could do. And they created sufficient interest to found thriving user groups in the US, Europe and Japan.

TOP and, more especially, MAP were born of frustration. GM found that nearly half the cost of any automation project arose from the inability of a plant item from one vendor to talk to its neighbour from another vendor.

Each vendor of robots, programmable controllers, data collection systems and so on used a different networking system. If a programmable controller needed to exchange data with a robot, special interfacing software had to be written to allow this facility.

Despite such interfaces, GM also found that supervisors of a single part of a production process sometimes had to consult five different system suppliers' screens and type information from one screen on to the keyboard of another.

For example, if one maker's computer is acting as a cell controller and reports a fault because of a worn part, the supervisor has to refer to a second maker's computer to find out if there is a replacement available and a third maker's system to see who is available to do the repair.

Eight years ago, GM, about to embark on a multi-billion dollar (and nearly disastrous) capital investment programme, decided

to press for a system which would enable all the machines in a factory to be plugged along a single cable, regardless of who made the machine.

It set up a task force in 1980 to find ways of standardising communications in its factory. MAP, which GM adopted in October 1982, was the result.

The US market for factory communications will grow by at least 180 per cent a year to \$2bn in 1992, say industry analysts

GM realised it had no hope of persuading vendors to create such a system just for GM. So GM wisely decided to base MAP on the emerging OSI standards being promoted by the International Standards Organisation (ISO). This would create a worldwide market for MAP products.

Later, Boeing came to the same conclusions about the interchange of technical office data such as drawings and other information. Both companies issued ultimatums to their suppliers: in effect, conform to these standards or we will take our business to companies who do.

By 1984, the vendors were falling over each other to boast of the ease with which their systems interconnected with everyone else's. Whatever else may be said about MAP and TOP, these two initiatives mark the first occasion on which computer users began to dictate terms to even the mightiest of their suppliers. And the ramifications extend well beyond manufacturing. One reason why Baltimore was chosen for ENE is that it is close enough to attract the financial community, which is seen as an important future market for TOP.

But the road to Baltimore has been tough. The users have shown a lot of interest, but shelled out little cash. One reason may be a campaign by DEC's founder, Ken Olsen, against the physical connections MAP specifies.

MAP uses one method of allowing each node access to the network. TOP uses an older 'Ethernet' type technique which, as it happens, Olsen's company has been selling for years. The two are incompatible but work perfectly well in their different applications.

GM has compromised heavily on all sorts of other issues over the years. To accommodate European and process control interests it has agreed to a simpler, cheaper form of MAP which uses a single channel instead of broadband cable. But GM, which argues that no node can be guaranteed access to an Ethernet system within a certain time, will not consider MAP on Ethernet.

Whoever is right, the argument has obscured the fact that the

functions defined elsewhere in the MAP and TOP specifications are much more important than the physical method of connection.

Another problem for potential MAP users has been its cost, though most of the press criticism has compared the cost per connection between MAP and

other systems without adding the undoubted benefits of being able to connect any piece of equipment to the network at once or those of improved information flows.

Another much-hyped MAP drawback is that "the product isn't here yet," though earlier MAP interfaces will be updatable to MAP version 3.0, the version launched in Baltimore this week, by changing two PROM chips.

A bigger headache for MAP/TOP's promoters has been the late delivery of conformance tests. If truly conforming MAP and TOP products are to be commercially available from ENE onwards, it follows that all the products shown at ENE have passed tests which confirm that those products meet the speci-

fication and work with each other. In the case of MAP and TOP it probably takes eight or more such tests to define the systems fully. But to qualify for demonstration at ENE, products need to pass only four tests. The programme to develop the other tests ran aground.

The good news is that most of those involved in ENE say the four tests are enough to define about 90 per cent of what is needed. The other good news is that, thanks in part to GM and Boeing, IBM, DEC and the rest of the computer industry has gone so far down the OSI road that there is no turning back. The Japanese have been industriously boning up on MAP and TOP and will demonstrate and release products next year at the latest.

All manufacturing businesses will have to improve their data communications because the competition will force them to do so. Dataquest says the US market for factory communications will grow at 180 per cent a year to \$2bn in 1992. Any chief executive who dismisses communications as unimportant or goes for a single vendor, non-OSI system, probably needs a long holiday.

John Dwyer Editor of FinTech 4, "Automated Factory" newsletter.



MAP - manufacturing automation protocol - was devised by General Motors of the US. Both MAP and TOP (its office equivalent) were born of frustration. GM found that nearly half the cost of any automation project arose from the inability of plant equipment from one vendor to talk to its neighbour from another vendor.



Unless you build a bridge you may have to rebuild your computer system.

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olivetti



TOP - the technical and office protocol, championed by Boeing. The Japanese are industriously boning up on both MAP and TOP.

Force for progress

Unix based on an IBM prototype. On the one hand, it is comforting that everybody agrees that Unix is the way ahead; on the other the computing world is now split in two. The question of what kind of standard man/machine interface and what standard architecture should be agreed for connection to local area networks are yet to be resolved. Russian trucks, it will be remembered, are not exciting, but they roll inexorably onward.

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هكذا صنعنا التصل

WORLD STOCK MARKETS

Table with columns for country (Austria, France, Italy, Sweden), stock name, high, low, and price. Includes sub-sections for Australia and Japan.

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Table with columns for country (Austria, France, Italy, Sweden), stock name, high, low, and price. Includes sub-sections for Australia and Japan.

CANADA

Table with columns for stock name, high, low, and price. Includes sub-sections for Toronto and Montreal.

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NEW YORK STOCK EXCHANGE COMPOSITE PRICES

44

Closing Prices June 3

Main table containing stock prices for various companies, organized in columns with headers for stock name, price, and change.

Continued on Page 45

NYSE COMPOSITE PRICES

Table of NYSE Composite Prices listing various stocks with columns for High, Low, and Change. Includes a 'Continued from previous page' section at the top left.

AMEX COMPOSITE PRICES

Table of AMEX Composite Prices listing various stocks with columns for High, Low, and Change.

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CURRENCIES, MONEY AND CAPITAL MARKETS

LONDON RECENT ISSUES

FOREIGN EXCHANGES

Pound adjusts to a stronger dollar and D-Mark

BY COLIN MILLHAM

THERE WAS a certain temptation to say I told you so among some of the pundits in the City last week. Barclays de Zoete Wedd even split out these words reading down the first letter of each line on one of their Reuter Monitor pages.

and failed to see that the dollar's steady downward slide had come to an end. A strong test of whether the dollar has really turned the corner may come on June 14, with publication of the US trade figures for April.

thought, which includes BZW, the pound's reversal was largely the result of the return to favour of the dollar. BZW has focused its attention on the level of US savings, and its effect on funding the very large budget deficit.

Any further tightening of the Federal Reserve's monetary policy will make savings even more attractive, reducing the reliance on foreign investors to fund the budget deficit, and removing a major reason for a bear market in the dollar.

above its 200-day moving average on charts for the first time since the beginning of last year. The 50-day moving average is also moving up.

deficits will pull the dollar lower later this year. The future of the dollar has obvious implications for sterling to the next few months. Mr Mackinnon said he believes the Bank of England has turned its attention away from the D-Mark, and back to the pound's exchange rate index.

IN NEW YORK

Table with columns: Date, Price, Change. Includes data for 1000, 100, 10, 1, 0.10, 0.01, 0.001, 0.0001, 0.00001.

EMS EUROPEAN CURRENCY UNIT RATES

Table with columns: Currency, Unit, Rate, % change. Includes data for Belgium, France, Germany, Italy, Netherlands, UK.

CURRENCY RATES

Table with columns: Currency, Rate, % change. Includes Sterling, US Dollar, Canadian Dollar, Australian Dollar, etc.

POUND SPOT - FORWARD AGAINST THE POUND

Table with columns: Date, Price, Change, % change. Includes data for 1 month, 3 months, 6 months, 12 months.

DOLLAR SPOT - FORWARD AGAINST THE DOLLAR

Table with columns: Date, Price, Change, % change. Includes data for 1 month, 3 months, 6 months, 12 months.

CURRENCY MOVEMENTS

Table with columns: Currency, Movement, % change. Includes Sterling, US Dollar, etc.

EURO-CURRENCY INTEREST RATES

Table with columns: Term, Rate, % change. Includes 1 month, 3 months, 6 months, 12 months.

OTHER CURRENCIES

Table with columns: Currency, Rate, % change. Includes Argentine, Australian, Canadian, etc.

EXCHANGE CROSS RATES

Table with columns: Currency, Rate, % change. Includes US Dollar, British Pound, etc.

FORWARD RATES AGAINST STERLING

Table with columns: Term, Rate, % change. Includes 1 month, 3 months, 6 months, 12 months.

MONEY MARKETS

STERLING'S DECLINE last week brought about a welcome opportunity for the Bank of England to signal a rise in UK bank base rates.

last week traders unwound long positions in the pound and short positions in the D-Mark, leading to a realignment of the two currencies.

Interest rates to direct sterling's course. Intervention is not expected on a large scale, but may be used to smooth the pound's decline, and insure there is no threat of sterling going into free fall.

Mr Richardson said he does not believe the authorities will go for a rise of 1 p.c. at a time in rates, and that another 1/2 p.c. is likely to be the next move.

FT LONDON INTERBANK FIXING

Table with columns: Term, Rate, % change. Includes 1 month, 3 months, 6 months, 12 months.

NEW YORK

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LONDON MONEY RATES

Table with columns: Term, Rate, % change. Includes 1 month, 3 months, 6 months, 12 months.

BANK OF ENGLAND TREASURY BILL TENDER

Table with columns: Term, Rate, % change. Includes 1 month, 3 months, 6 months, 12 months.

WEEKLY CHANGE IN WORLD INTEREST RATES

Table with columns: Term, Rate, % change. Includes 1 month, 3 months, 6 months, 12 months.

AMSTERDAM

Table with columns: Term, Rate, % change. Includes 1 month, 3 months, 6 months, 12 months.

PHILADELPHIA SE 1/8 OPTIMS

Table with columns: Term, Rate, % change. Includes 1 month, 3 months, 6 months, 12 months.

LONDON SE 1/8 OPTIMS

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ESTIMATED VOLUME LOCAL

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EQUITIES

Table with columns: Stock, Price, Change, % change. Includes various equity listings.

FIXED INTEREST STOCKS

Table with columns: Stock, Price, Change, % change. Includes various fixed interest stock listings.

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JAPANESE YEN INDEX

Table with columns: Term, Rate, % change. Includes 1 month, 3 months, 6 months, 12 months.

THREE-MONTH EURO-DOLLAR (GDM)

Table with columns: Term, Rate, % change. Includes 1 month, 3 months, 6 months, 12 months.

STANDARD & POORS 500 INDEX

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EUROPEAN OPTIONS EXCHANGE

Table with columns: Stock, Price, Change, % change. Includes various European options listings.

BASE LENDING RATES

Table with columns: Bank, Rate, % change. Includes various bank lending rates.

TOTAL VOLUME IN CONTRACTS

Table with columns: Term, Rate, % change. Includes 1 month, 3 months, 6 months, 12 months.

FT - ACTUARIES WORLD INDICES

Table with columns: Index, Rate, % change. Includes various actuarial world indices.

NATIONAL AND REGIONAL MARKETS

Table with columns: Market, Rate, % change. Includes various national and regional market listings.

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